

LING BOTTOM LONGLINE LIN 2-7

OPERATIONAL PROCEDURES

VERSION 4.0



deepwater
group

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PART 1: INTRODUCTION

The following Operational Procedures (OPs) stipulate the management measures agreed between Deepwater Group Ltd (DWG) shareholders owning LIN 2-7 quota and Fisheries New Zealand. They are implemented and administered by DWG.

These procedures apply to all longline vessels targeting ling stocks LIN 2-7.

Disclaimer: *These OPs do not replace or override any fisheries legislation or other regulations including Health & Safety, Maritime Safety, Animal Welfare or Wildlife Acts. Vessel operators are required to ensure that both they and their crew understand all regulations that are relevant to the fisheries and environment that they are operating in, and that crew and vessel safety must always be considered.*

Background to these procedures

The ling bottom longline fishery (LIN BLL) has observed incidental captures of seabirds. At times these events are significant in number, or species of bird caught, with an effort of 20-25 million hooks set capturing an estimated 400-1400 seabirds annually.

It is known that ongoing management, monitoring and improvement is required to continue to reduce these risks.

In 2006 - 07 the then Ministry of Fisheries regulated demersal longline fishing specifically to manage seabird risk. These regulations have been updated in 2021 and these OPs reflect these changes.

The characteristics of ling longline fishing that can increase the risk of incidental captures are:

- Setting large numbers of hooks (20-25 million per annum) and from 3,000 to 30,000+ per vessel per day
- Attraction of birds to baited hooks or other fish waste near hooks
- Fishing grounds and seasons in some areas are known for high seabird numbers and foraging activity.

National Plan of Action-Seabirds (NPOA-Seabirds)

The National Plan of Action to reduce risk to seabirds in New Zealand fisheries (NPOA-Seabirds) sets the management approach. It is drafted in accordance with the requirements of the Agreement on the Conservation of Albatrosses and Petrels (ACAP), to which New Zealand is a signatory.

The NPOA-Seabirds seeks to ensure that effective mitigation methods are applied in New Zealand fisheries, acknowledged risk reduction methods are applied as appropriate, and actions to manage risk to seabirds are prioritised based on the level of risk faced by particular seabird species and posed by the various fishery sectors.

Specific Mitigation Standards were agreed upon by DOC and FNZ as a part of renewing the NPOA Seabirds in 2020, in conjunction with reviewing the regulations to better align with what is considered general best-practice objectives.

Through Fisheries New Zealand a spatially explicit risk assessment is used to assess the risk to seabird species from particular fisheries. Currently, about 10 species are assessed to be in a high-risk category and therefore need continued attention. Several of these species with high risk scores have been observed captured in the ling longline fisheries, notably Chatham,

Buller's, white-capped and Salvin's albatross. White-chinned petrels are also of particular concern due to the relatively high number of captures.

These OPs have been established so that agreed and required management measures are clearly communicated to and understood by vessel captains, vessel managers and ACE providers.

Objectives of these procedures

The objectives of these OPs are to ensure that:

- Risks to seabirds from longlining are mitigated and seabird captures are reduced
- Every vessel has robust, documented and easy-to-follow seabird mitigation procedures in place that meet all mandatory and DWG-required mitigation measures
- Mandatory measures are understood and are complied with
- Understand the Mitigation Standards for bottom longline and work to use these to reduce risk to seabirds as relevant
- Through implementing these OPs, the vessel crew is actively involved in seabird mitigation measures and improvements.

Status of these procedures

These OPs came into effect in 2016 and with updates, remain so.

Application of these procedures

These OPs apply to:

- All companies and vessels targeting ling (LIN 2-7 stocks) by bottom longline.

Other key operational documents or rules & regulations

These OPs are to be used in conjunction with, but do not replace or override, the following:

- Fisheries (Seabird Mitigation Measures – Bottom Longlines) Circular (No 2) 2021 (the (Notice No MPI 1375) [Bottom Longline Seabird Mitigation Regs 2021](#))
- Regulations pertaining to processing of sharks
- Maritime Safety, Navigation and Pollution regulations and requirements
- Wildlife Protection Act 1953 and Animal Welfare Act 1999
- All and any relevant laws and regulations pertaining to fisheries activities in New Zealand waters.

PART 2: RISK

Seabirds (see Table 1) are attracted to the setting of baited hooks, loose bait, offal and discards from the vessel or whole fish on the hauling line. Once attracted, they are at risk of injury from the gear or being hooked and drowning.

Table 1: Main seabird species at risk from LIN BLL fisheries

SEABIRD SPECIES	RISK AREA	RISK TIME	RISK PROFILE
Salvin's albatross	Chatham Rise & Bounty	Aug-May	Second highest risk bird in NPOA Risk Assessment; threat classification 'nationally critical'; aggressive feeder around vessels
Chatham albatross	Chatham Rise	Aug-May	High-risk classification within NPOA Risk Assessment; aggressive feeder around vessels; small population
White-chinned petrel	Chatham Rise, Snares, Solander Island, Keyhole & Sub-Antarctic	Year-round, particularly aggressive during a full moon	Most frequently caught bird; very numerous, a strong diver & aggressive feeder around vessels; particularly aggressive during a full moon
Sooty shearwater	Snares & Solander Islands	Spring, summer and autumn	High numbers; strong diver

Risk to seabirds is driven by three main factors which can occur alone or together:

- Food attractant:** offal, waste, bait discards, fish on the hauling line
 - The more food, the more birds around the vessel, increasing the risk of captures.
- Baited hooks during line setting and hauling:**
 - Seabirds are attracted to baited hooks during line setting and are either beak-hooked or get foul-hooked when baits come off or become entangled in the line.
 - The risk increases the longer the hook is on or near the surface and is made worse by poor sink rate (e.g., if there is not enough line weighting, there are floats on the gear or if the vessel is moving too fast).
 - Risk is also increased if the tori line is poorly designed or deployed and does not provide adequate cover over the gear when setting.
 - During hauling caught fish, unused baits or fish waste discharge can create risk.
- Fishing area and calendar period:** increased seabird numbers and aggressive feeding
 - During periods of high bird numbers (e.g., breeding season, migration periods or moon periods) the feeding behaviour becomes more aggressive and competitive, increasing the risk of captures.

Managing risks associated with these three factors at a vessel level will help minimise interactions and reduce the incidental captures of seabirds.

PART 3: MANAGING RISK

Fish waste management

- Operate an offal control system to ensure no discharge of offal and fish waste occurs when setting, and that offal and fish waste is discharged in batches on the opposite side from the haul station during hauling. See legal requirements below.

- Hold used baits and batch discharge to ensure no continuous or ad hoc discharge of offal and fish waste occurs when fishing.

Setting station

- Carry and deploy a vessel-specific tori line that meets the required standards, as well as carry spare parts to rebuild or replace tori line if damaged or lost.
- Meet the required mandatory standards sink rate to be at 5 m depth under aerial extent of tori line.
- The use of totally frozen bait is to be avoided as it floats more than when thawed.

Hauling station

- Hose spray is often enough to deter seabirds from the area.
- A seabird mitigation device can be fitted around the hauling station on larger vessels; brickle curtains are often used for this purpose and are very effective.
- Used bait and all fish waste should be held for as long as possible and/or discharged on the other side of the vessel from the hauling station.
- Operational practices to minimise the amount of time hauled hooks remain at or near the surface (e.g., adjusting haul speed or hauling as close to the vessel as possible).

High-risk periods

MPI has regulated the High Risk Periods for BLL fishing; daylight hours (0.5 hours before nautical dawn and 0.5 hours after nautical dusk) and during a full moon and three days on either side of the full moon.

Full moon

During full moon periods, seabirds (especially diving birds) can enter a feeding frenzy leading to very high capture rates.

Mitigation options include:

- Increasing line sink rate, e.g., add weight and/or remove floats and/or reduce setting speed
- Adding another streamer line
- Moving from the immediate fishing area.

Multiple captures while setting the gear

- Take immediate action to reduce the risk of multiple captures reoccurring.
- Contact vessel manager and/or DWG Environmental Liaison Officer for advice and report seabird triggers in real time or ASAP (within 24hrs) as advised below in Part 4.

Lighting

- Bright spotlights shining back over the stern well behind the vessel onto the hook setting line should be either off, replaced with lower light output or shielded from shining on the longline.
- Deck lighting around stern should be managed during night-time setting while maintaining required safety standards for vessel and crew.
- While sheltering or at anchor keep additional and unnecessary deck lighting to a minimum so as not to attract or disorientate seabirds.

Responsibilities of parties

The following outlines the responsibilities of parties to the LIN BLL OPs.

Commitment to these procedures

All DWG shareholders owning LIN 2-7 quota and ACE, and owners or operators of vessels in these ling bottom longline fisheries, are required by DWG to support and adhere to these OPs.

Vessel owner and operator responsibilities

All vessel owners and operators must ensure that:

- Officers and crews of all bottom longline vessels targeting ling stocks LIN 2-7 in FMAs 2-8 are aware of and act in accordance with the requirements of these OPs.
- Fishing operations meet mandatory requirements as set out in the Regulations and best practice standards.
- Key crew are briefed on these OPs and fully understand the actions required.
- Ensure new (or relief) managers or captains receive proper handover of these OPs and advise DWG so refreshers can be undertaken if needed.
- The vessel is meeting its sink rate requirements, carrying sufficient weights to maintain line weighting and sink rate procedures to mandatory requirements, and when required night fishing to reduce the risk of captures.
- The vessel is supplied with a tori line and sufficient parts to maintain and repair the tori line in the event of loss or damage.
- Auto-line baiting machine is maintained to ensure baiting levels are +95%.
- Correct reporting to Fisheries New Zealand and DWG, and that trigger reports are sent to DWG in real time.
- The DWG Environmental Liaison Officer is contacted as required for information or support
- Any required corrective action is undertaken.
- Crew meet their responsibilities below.

Vessel crew responsibilities

All vessel crews must:

- Ensure all OPs and documents to manage seabird risk are aboard and understood.
- Display a copy of the “Ten Commandments for Ling Longliners to Save Seabirds” (see Appendix 1) on the bridge.
- Ensure all fishing practices and mitigation meet mandatory requirements.
- Mitigation devices are deployed and adjusted to best suit weather, fishing gear and operations, and fish and bait waste discharge conditions to minimise risk.
- The vessel is meeting its sink rate requirements, carrying sufficient weights to maintain line weighting and sink rate procedures to mandatory requirements, and when required night fishing to reduce the risk of captures.
- Key crew are aware of seabird activity around the vessel, assess the risks and take action to minimise these risks.
- Handle captured seabirds safely and carefully, returning all seabirds to the sea (unless requested otherwise by Fisheries New Zealand Observer) as per best practice.

- Report triggers to DWG and report capture via Fisheries New Zealand Electronic Reporting System (ERS) or in paper form using Non-fish/Protected Species Catch Return (NFPSCR).

DWG Environmental Liaison Officer's responsibilities

- The DWG Environmental Liaison Officer will review each vessel's adherence to these OPs during any vessel visit and crew briefings, as well as providing feedback from any Fisheries New Zealand Observer audit
- The aggregated outcomes of these audits, and the number of issues that arise each fishing year, are publicly reported by Fisheries New Zealand in its Annual Review Report (noting that individual vessel details are confidential to the operator, DWG and Fisheries New Zealand).

Mandatory Fisheries New Zealand seabird mitigation requirements

Summary

Fisheries New Zealand implemented regulatory requirements for seabird risk mitigation. These standards are required to be met as described by the Regulations. DWG provides guidance below on best practice to meet and implement these requirements on your vessel and FNZ has also produced a summary sheet to the Regulations. See Appendix 7A - FNZ BLL Requirements for vessels between 7 to 20 m vessels (excluding autoliners).

You should have a full copy of the Regulations on board and understand them. The points below are clearly written in the Regulations ([Bottom Longline Seabird Mitigation Regs 2021](#) - See Appendix 8)

Streamer (tori) lines: Streamer lines must be deployed day and night during setting and meet design specifications. The streamer line must achieve a minimum aerial extent of 50 metres when fishing during the defined high-risk periods.

Dahn lining: Vessels that exclusively use the method of dahn lining are not required to carry a streamer line.

Line weighting: Longlines must be weighted so that the slowest sinking hook can be demonstrated to reach a depth of five metres (5 m) within (i.e., under) the aerial extent of the tori line.

Sink Rate tests: You are required to conduct sink rate tests via bottle testing or deployment of Temperature, Depth, Recorders (TDRs).

Carry out bottle tests (Appendix 5: Bottle Sink Rate Test Protocol) for the different longline gear configurations and different target species gear configurations and record those results onboard (in accordance with mandatory requirements).

Offal and fish discharge: Offal or fish must not be discharged during the setting of bottom longlines. (Some exceptions apply for sub-MLS fish and Schedule 6).

Offal or fish may only be discharged during hauling provided it is discharged from the opposite side on which the hauling station is located (some exceptions apply - see details following). Note there are waivers for Schedule 6 of the Fisheries Act 1996 or sub Minimum Legal Size (MLS) fish during hauling only.

Gear and area restriction's FMA 6: A bottom longline must not be set between 1 November and 31 May in FMA 6 unless using an Integrated Weighted Line (IWL) with a lead core of at least 50 grams per metre.

Tori lines (also see Regulations where tori lines are described as streamer lines)

Tori lines are regarded as one of the most effective mitigation measures. **All vessels 7 m or longer in overall length must deploy a tori line during setting.**

Common names of parts of a tori line

A tori line consists of three parts,

- The **vessel attachment** and adjustment section attach to the vessel structure, clipped onto the backbone when setting.
- The **backbone or streamer aerial section** has all streamers hanging from it and has a drag on its seaward end (streamers are the coloured droppers to deter birds).
- A **drag object** which keeps the line under tension and holds streamers up out of the water.

For vessels 7-20 m LOA the tori line must also meet the following minimum specifications

- The tori line must achieve a minimum aerial extent of 50 m when fishing during high-risk periods.
- Must be attached at a point no less than 5 m above the waterline, we recommend 7 to 8 m+ to achieve superior aerial extent.
- Streamers may be shortened along the first 15 metres of the streamer line however these streamers must be maintained at a minimum length of one metre.
- The streamers must be brightly coloured, be spaced a maximum of 5 m apart, and extend along the entire aerial extent of the line.
- The first streamer must be no more than 5 m from the stern of the vessel.
- The streamers must reach the sea surface; streamers will therefore vary in length along the line.
- For vessels over 20 m LOA, and all autoline vessels the tori line must be a minimum of 150 m in total length.

Best practice for tori lines

Achieve around 60-70 m of aerial extent using a three-part system (see Appendix 4: BLL Tori Line Design Guide).

1. Vessel attachment:

- Tori line placed as high as possible and recommended 7-8 m above the waterline
- Depending on the position the gear is shot away from, be able to adjust or move the tori line or use a bridle place tori in the best spot relative to fishing gear
- A breakaway system should be fitted so the tori line will break free before fishing gear breaks or tangles

2. Streamer aerial section:

- The backbone of the tori line with a minimum of 10-12 sets of streamers spaced at 4 m or 5 m intervals.
- Depending on the height (off the water) of each streamer line, reduce the length of each streamer by approximately 30 cm - 50 cm+ going down the backbone.

- Once deployed (without the setting gear) the first time, trim streamers to meet the water in average conditions but not remain in the sea to reduce drag, tangling gear and birds (i.e., so streamers are in the air, not in the water)
3. Drag section:
 - Can be either a float(s), or rope, or mono, or all of these.
 - If the vessel is using an auto baiting machine or is over 20 m in length, the whole tori line must be 150 m long. For vessels less than 20 m, recommended length is 70 to 90 m long with rope, float, cone (or both), or a very long section of mono for drag.
 4. Adjust tori line to best suit weather, gear and processing conditions to minimise risk during periods of high seabird interactions
 5. Tori lines if not deployed or adjusted correctly often tangle with setting gear. To reduce this, maintain height separation for as long as possible between the tori line and setting gear:
 - Fix the tori line as high as possible to the vessel (every 1 m height will give you 8-9 m more aerial extent).
 - Increase the drag (most tori lines don't have enough drag) by increasing the size, length or weight of the drag object.
 - Trade-off: Either mono or very long length of small diameter rope (placed on reel etc) which is less likely to snag with the setting gear but at least 100 m is required to provide enough drag versus adding a float(s) to end of a shorter (20-30 m) larger diameter (12-14 mm) rope. Trial and error will be required as to what suits best.
 - Keep streamers out of the water. Only the last section of the backbone without streamers should be in the water back to the drag object.
 - Fit a breakaway (weak link) so if a tangle occurs the tori line breaks at the weak spot, then there is no damage to other gear. Have a lazy line back to the deck so you regain the vessel end of the tori line and retrieve it.

Line weighting (also see Regulations)

Setting bottom long lines with an effective sink rate greatly reduces the risk of seabird captures. Sink rates must meet the following specifications:

- **Longlines must be weighted so that the slowest sinking hook can be demonstrated to reach a depth of five metres (5 m) within the aerial extent of the tori line.** The tori line needs to maintain a minimum of 50 m aerial extent when fishing during high-risk periods.
- **You are required to conduct sink rate tests** for the different longline gear configurations or target species gear changes you use and record those results onboard. (Appendix 5: Bottle Sink Rate Test Protocols).
- Meeting the required sink depth before the tori line reaches the water surface, you need to make changes to improve your sink rate.
- Add larger weights or add more weights at closer intervals to improve tori line aerial extent performance and/or reduce floatation, perhaps extend the length of the float-ropes.
- Bottom longline IWL with a lead core of at least 50 grams per metre, must only be used to take fish, between 1 November and 31 May in FMA 6.

Measuring and recording your sink rate - Bottle Sink Rate Test

- Sink rates must be measured at regular intervals (once per calendar month or when gear setup significantly changes) via bottle tests or time-depth recorders and the results documented and retained on the vessel for a minimum of one year.

- These records must be made available to Observers or Fisheries Officers upon request.
- The bottle test is a simple way to measure your longline sink rate. In summary, clip an empty plastic bottle onto the backbone when setting with a 5 m length of line between the bottle and the clip, when the bottle is pulled below the surface that indicates distance astern when the gear was at 5 m depth. (See Appendix 5 for instructions on how to carry out bottle sink rate tests).

Best practice for line weighting and good sink rate (approximately 0.3 m per second)

- Weight line to achieve satisfactory sink rate so seabirds have less time to target the baited hooks.
- In times of heightened risk, add more weight and/or remove some floats or add longer ropes to float ropes.
- Using line setters or slowing the vessel's setting speed will reduce tension on the setting line and increase the sink rate.
- Applying similar weights at regular intervals will help maintain a steady sink rate.
- Do not fit single large weights at wide intervals, this will pull down the backbone in one area while floating the rest of the line behind it.
- Reducing boat speed will help improve the sink rate but you will also reduce your tori line aerial extent.
- Integrated Weighted Line (IWL) lead core (at least 50 grams per metre) backbone achieves 0.3 m/s sink rate and is considered the world's best practice for steady and consistent sink rate.

Offal and fish discharge measures (also see Regulations)

The following minimum specifications must be followed:

- **During setting**, fish waste, offal or fish cannot be discharged from the vessel. The exceptions are:
 - if the fish are legally undersize (sub-MLS)
 - the fish are listed in Schedule 6 of the Fisheries Act 1996 and are likely to survive.
- **When hauling** the line, offal, used bait or whole fish can only be discharged from the opposite side of the vessel to which the line is being hauled unless:
 - any live fish and those whole dead fish greater than 30 cm (fork) length can legally be discarded only when a hauling mitigation device is deployed.

A hauling mitigation device deters/blocks seabirds access from flying or swimming directly into the hauling area.

Best practice for fish waste control

- No continuous or ad hoc discharge of fish waste. All offal/fish waste discharge is to be managed (held and batched) at intervals as well as meeting the mandatory standards above.
- Offal should be held (in bins, fish pounds, etc.) for as long as practicable and the 'batch' should be discharged when fishing ceases or, if required, during hauling on the opposite side of the hauling station.

Best practice for bait

- When hauling, used bait must be held and discharged after hauling has ceased.

- The automatic baiting machine must be well-maintained to achieve a high baiting percentage (+95%). Baits falling from the machine or off hooks into the water will attract birds to the setting area and is proven to result in foul hooking of birds. A high baiting rate will also help your fish catch.
 - Measure baiting percentage by counting (with a shearing tally clicker counter) 100 hooks as they leave on shooting and adding up non-baited hooks.

PART 4: WHEN CAPTURES OCCUR

DWG reporting requirements

Trigger points and vessel action

Trigger points are the DWG capture incident threshold system to trigger real time reporting. Once a trigger point is reached, the vessel captain will notify their vessel manager and DWG within 24 hours (and must monitor the situation more closely and take the steps noted above to manage the increased risk).

DWG trigger points

These are reached when in any 24-hour period seabirds captured and landed dead on deck equal or exceed:

- 3 or more large seabirds (dead or alive albatross or mollymawks)
- 5 or more seabirds (dead or alive petrels, shearwaters, albatross or mollymawks)

Or when in any 7-day period there are:

- 10 captures or more of seabirds of any type (alive and/or dead)

Trigger reports

Report all DWG trigger point breaches in real time (within 24 hours) to admin@deepwatergroup.org. Note these emails are copied directly and immediately to DWG Environmental Liaison Officer (John Cleal) and Richard Wells. The ELO will provide support and may seek additional information for any necessary follow-up.

DWG CONTACTS (AVAILABLE 24/7)	PHONE	EMAIL
DWG (email auto-forwards to John & Richard)		admin@deepwatergroup.org
John Cleal (ELO)	021 305 825	admin@deepwatergroup.org
Richard Wells	021 457 123	admin@deepwatergroup.org

Fisheries New Zealand mandatory reporting requirements

It is not illegal to accidentally capture protected species while commercially fishing, but **it is illegal to fail to report the capture**. All captures and mortalities must be reported accurately. Having an Observer on board does not release the vessel from its reporting obligations. All protected species landed dead or alive (then returned to sea), including deck strikes, must be recorded via the vessel's ERS as required under the Reporting Regulations.

Always meet your legal requirements. See Appendix 2: 10 Golden Rules for Non-Fish Protected Species Reporting Requirements.

“Captures” = birds (and mammals) that have become fixed, entangled or trapped, and are prevented from moving freely or freeing themselves (i.e., interactions with fishing gear or tori lines).

“Deck-strikes” = birds that collide with the vessel superstructure or deck and are unable to leave the vessel on their own, either through death, injury or disorientation. Do not report any seabird if it is alive and leaves the vessel unassisted.

Note deck-strikes are not included in the Fisheries New Zealand fishing seabird capture estimates but must be reported.

ERS or NFPSCR reporting codes

- Use the XAL (unidentified albatross/molloyhawk) and XXP (unidentified petrels & shearwaters) species codes; if you are 100% sure of the correct species use the individual species codes supplied by Fisheries New Zealand (common species listed in Appendix 3).
- Record any leg band numbers in the ERS field provided for on the form.

Seabird handling, release and crew safety

Release alive

Every care should be taken to release seabirds alive and unharmed. Handling with care to reduce stress and to minimise any further harm or injury to the animal will increase its chances of survival when being returned to the sea.

It is an offence to deliberately harass or harm any protected species and this includes wilfully retaining, damaging, mutilating or removing parts of dead birds.

Beware large birds can inflict a serious bite; it is recommended to use gloves and eye protection.

Bird handling and release

- Keep the bird calm by covering its eyes and head with a cloth. Where possible use two crew. One (Crew 1) to hold and support the bird, and one (Crew 2) to free the bird from the gear. Equipment: use line cutter, bolt cutter, pliers, long handle net.
- Reduce drag on bird, pull boat out of gear, bring bird on board by hand/with long handle net.
- Crew 1: Secure bird by holding wings gently but firmly to the bird's body. Support head, neck etc.
- Crew 2: Isolate tangled gear and or hook, work on removal of gear/hook.

Hook swallowed

- Do not pull or place pressure on the line/hook.
- Crew 2: Cut the line as close as possible to the swallowed hook, leaving the hook untouched in place.

Hook through body part

- Crew 2: Trim off any line, cut or flatten off the barbs from the hook and reverse the hook out; or use bolt-cutters, cut the hook in two and thread out.

Gear tangled

- Crew 2: Remove line, cut away gear, locate hook, ensure hook free from the bird, all gear free from the bird.

Return to sea

- If the bird is waterlogged, put it in a safe space (e.g., an empty fish crate, box, or an open, safe area on deck) and let the bird dry out. When the bird is dry or active again, ease the bird back into the water as close to the water surface as possible.
- Release bird carefully; don't throw seabird into the air, place back on the water surface or release downwards as close as possible to the sea.

Report captures to the bridge/captain

PART 5: AUDIT AND REVIEW

The following outlines the external review requirements for incidental captures and conformance with these OPs.

LIN BLL OP and Fisheries New Zealand Observer review form

During any voyage with a Fisheries New Zealand Observer present, the Observer will review the vessel equipment and performance against the vessel's LIN BLL OP.

The Observer Review Form (Appendix 6) is used to document the assessment of vessel and crews' performance and can be used to identify what to expect during the process.

The review form is completed by the Observer at the end of the voyage and submitted to Fisheries New Zealand. A copy is also sent to DWG for review, who forward this to the vessel operator.

Any negative issues or events noted by the Observer with regard to vessel or crew performance against the LIN BLL OPs will be followed up and addressed with the vessel operator. Good performance will also be noted.

If in doubt, talk to the Observer about your performance and address any issues immediately. When the report is good, thank your crew.

The aggregated outcomes of these audits, and the number of issues that arise each fishing year, is publicly reported by Fisheries New Zealand in its Annual Review Report (note that individual vessel details are confidential to the operator, DWG and Fisheries New Zealand).

PART 6: SHARKS

Regulations and practices regarding sharks

- Fisheries New Zealand (previously MPI) introduced further regulations in 2014 regarding sharks.
- These regulations are further outlined in the four factsheets (Appendix 7B).
- Take every care when releasing live sharks to ensure the safety of the crew and the least harm to the shark.

APPENDIX 1: TEN COMMANDMENTS



TEN COMMANDMENTS

FOR LING LONGLINERS TO SAVE SEABIRDS

- 1.** Ensure your vessel has the current Ling Bottom Longline Operational Procedures (OPs) and bottom longline seabird regulations on board.
- 2.** Ensure tori line meets legal standards, is always deployed when fishing (day & night), is adjustable over the mainline of your gear and carry ample spare parts.
- 3.** As legally required, ensure tori line is correct length for your vessel size, well-constructed, when deployed has min. of 50 m aerial extent and the backbone is fitted with a set of brightly coloured streamers spaced at no more than 5 m intervals.
- 4.** Know the line weighting legal standards. Use integrated lead weighted line (IWL) or for backbone over 3.5 mm add minimum 4 kg metal weight evenly spread over every 60 m of hook bearing line. Confirm your weight regime matches the law for any additional floats.
- 5.** If you're not line weighting in accordance with legal standards, set only at night (i.e. between nautical dusk and dawn) as legally required.
- 6.** Manage the discharge (i.e. no continuous discharge) of offal, fish waste and used bait. You cannot discharge any offal or fish waste while setting.
- 7.** While hauling only discharge offal, fish waste and used bait from the opposite side of the vessel to the hauling station, as legally required.
- 8.** Autoline vessels must ensure the baiting machine is well-maintained and achieves a high (i.e. >95%) baiting percentage. The use of totally frozen bait is to be avoided. Ensure any unhooked bait is retained and not lost overboard.
- 9.** Advise DWG (same day) when seabird captures reach Trigger Point. Email DWG Trigger Point Report to admin@deepwatergroup.org. Assess event and implement further risk reduction measures. Trigger points are:
 - Within any 24-hour period, 5 dead small (e.g. petrel/shearwater) or 3 dead big (albatross/molloyhawk); or
 - Within any 7-day period, 10 birds dead or released alive (all species).
- 10.** As legally required, report all seabird captures by ERS or in the Non-fish Protected Species Catch Return logbook and furnish to FishServe. Record and report bird band numbers.



deepwater
group

For support phone John Cleal (021 305 825) or Ben Steele-Mortimer (027 2343140)

APPENDIX 2: 10 GOLDEN RULES FOR NON-FISH PROTECTED SPECIES CATCH REPORTING



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.mpi.govt.nz/dmsdocument/45103-Fisheries-E-logbook-Users-Instructions-and-Codes-Circular-2021>

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

(from Fisheries New Zealand Electronic Catch and Position Reporting Guide August 2021)

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

s:\operational procedures\op manual 2018-19 & ten commandments\ten commandments\10 golden rules - nfps catch reports 230922 (dwg).docx

APPENDIX 3: FISHERIES NEW ZEALAND SEABIRD SPECIES CODES

Unless you can positively identify the seabird species, use the generic/unidentified codes listed directly below:

XAL – Albatrosses (unidentified)

XGA – Great albatrosses (unidentified)

XMA – Small albatrosses (unidentified)

XXP – Petrels, Prions and Shearwaters (unidentified)

Table 2: Common Fisheries New Zealand Non-Fish Species Codes

COMMON SEABIRD NAME	SPECIES CODE
Antarctic fulmar	XAF
Antarctic petrel	XAP
Antarctic prion	XPR
Antipodean and Gibson's albatross	XAG
Australasian gannet	XGT
Black-browed albatross	XKM
Black petrel	XBP
Buller's and Pacific albatross	XPB
Campbell albatross	XCM
Chatham Island albatross	XCI
Flesh-footed shearwater	XFS
Giant petrel	XTP
Grey-backed storm petrel	XGB
Grey petrel	XGP
Northern giant petrel	XNP
Northern royal albatross	XNR
Salvin's albatross	XSA
Sooty shearwater	XSH
Southern giant petrel	XSP
Southern royal albatross	XRA
Westland petrel	XWP
White-capped albatross	XWM
White-chinned petrel	XWC

APPENDIX 4: BLL TORI LINE DESIGN GUIDE

BLL Tori Line Design & Build - Guiding Principles (vessels greater than 7 m)

Use the tori line design guide diagram (over page) as a starting point to construct something that works for your vessel design and fishing practices.

A well-designed and deployed tori line reduces risk of seabird captures but only if it is used in conjunction with an effective sink rate.

Tori lines need to protect the sinking hooks, lines must be weighted in order to achieve at least a five metre depth within the aerial extent of the tori line.

Tori lines (streamer lines) must be used on BLL vessels 7m or greater in overall length for all sets (vessels Dahn lining are not required to use tori lines).

The streamer line must achieve a minimum aerial extent of 50 metres when fishing during high risk periods; High risk periods are all day light sets and during a full moon and three days either side of a full moon.

All autoliners and BLL vessels 20m or greater in overall length, must have a tori line that is a minimum of 150m in length.

To maximise performance, the tori line needs to be:

- Well-constructed, light weight but durable, easy to deploy and retrieve. It should leave the vessel as high as possible and have plenty of drag. You will need spare parts and should have a spare line set up and ready to deploy if a major tangle or breakage occurs.
- The key to reducing tangling issues - sink your gear to a required depth before the tori line reaches the water surface, be able to adjust or move the tori line to protect baited hooks with a bridle etc to suit the changing conditions. Keep all the streamers in the air not lying in the water and the drag in-water section needs to be streamlined to reduce the risk of tangling.

Three main sections of a tori line:

Vessel Attachment - This height is crucial in order to increase aerial extent

- **Height:** You are required to suspend the tori line from a point on the vessel at least 5m above the surface of the water and as close to the stern as possible. Ideally it should leave the stern at around 7m+ above the waterline. If necessary, fit a pole to get extra height (for every 1m of extra height above 5m you'll achieve about 7m more aerial extent).
- **Weak link/ breakaway system:** fit a weak link at the attachment point so that the tori line will break off at your weak link, or before the tori line 'spools off' your gear. Use a lazy line back to the deck so that you can regain control of the vessel end of the tori line if/when it breaks. If the tori line breaks or is lost, you need to redeploy another before setting any further gear.

Aerial Streamer Section - Suitable materials make a difference

- **Backbone:** This is the main part of the tori line which supports the streamers, the aerial extent 'backbone section' needs to be at least 50m to 60m long from the stern and you need to maintain a minimum 50m in the air, when fishing during high risk periods. Choose a material that is light-weight, durable and braided as it twists less.
- **Streamer materials:** Must be brightly coloured, suitable/durable, rigid, stiff, strong materials such as rubber tubing, tape, or cord, attached in a way that prevents streamers from wrapping around the backbone and tangling with each other
- **Streamer placement:** Must have streamers fitted at maximum of 5m intervals, along the aerial extent section, beginning not more than 5m from the stern of the vessel.
- **Streamers may be shortened:** along the first 15m of the streamer line to reduce tangling with the setting hooks as long as these are not shorter than 1m. The rest of the streamers need to reach down near the water surface (in calm conditions) along the aerial extent.
- **Do a test deployment:** Trim each longer streamer to suit your deployment height. In calm conditions the streamers must reach down close to the surface but ensure most of the time they are in the air and not the water (streamers in water are more likely to tangle with setting hook line, reduce aerial extent and can even tangle birds).

Drag Section - Drag section is crucial in order to increase aerial extent

- **Drag object:** A length of rope (braided rope materials twist less) or mono or an object like a cone or float, (or a combination of both) fitted to the end of the aerial streamer section. It needs to provide enough drag to maintain the streamer section to the required 50m aerial extent during high risk periods.
- To achieve 50m to 60m plus of aerial extent Sea-trials have shown a tori line deployed from a height of:
 - 5m to 6m (at around 5kn) requires about 30m to 50m of 9mm braid (500L) with either gill net-floats placed every few metres on the drag rope and a small road cone or buoy etc at the end to act as a drogue.
 - 8m to 10m, (at around 3kn to 4kn), required about 60+m of 9mm braid (500L) plus a short length of mooring rope or road cone or a float etc at the end to act as a drogue.

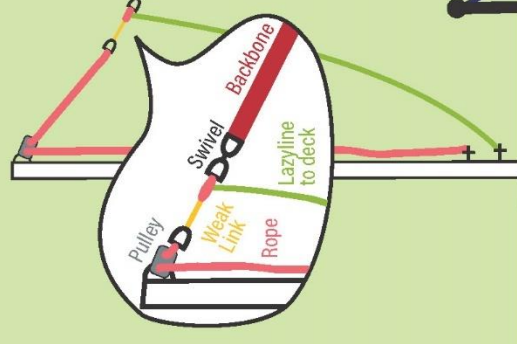
For more advice: Contact your local BLL Liaison Officer listed in your Protected Species Risk Management Plan

Disclaimer: This document has been produced to serve as a guide to the MPI Fisheries Regulations for Seabird Mitigation Measures Bottom Longlines, for use by the fishing industry. This is not intended to be nor should it be used, as a substitute to any statutory, regulatory, and/or non-regulatory requirements for Bottom Longline fishing. Before acting in reliance, either wholly or partially, on any information contained in this document 'guide/design', 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.

BLL Tori line Design Guide (vessels greater than 7m)

Vessel Attachment

Attached to the vessel at least 5m (recommended at 7m+) above the surface of the sea in calm conditions, and as close to the stern as practically possible.



Streamer Aerial Section

Lightweight to improve aerial extent, but durable, at least 60m+ in length (plus your drag section). The aerial extent section must achieve a minimum aerial extent of 50m when fishing high risk periods (not including the drag section):

- High risk period: all day light hours and for three days either side of the full moon.

Each Streamer must reach the sea surface, streamers must be spaced at a maximum of 5 metre intervals along the full aerial extent of the line.

Streamers must be brightly coloured and may be shortened along the first 15 metres however streamers must be maintained at a minimum length of one metre.

Minimum 5m (ideally 7m+)

max 15m
max 5m

This section is often in/out of water. Streamers in this section should be of a material and length that is less likely to tangle with the setting gear and/or birds.

Drag Section

For vessels with Auto baiting machines and those 20m or greater, the tori line must be a minimum of 150m in length.

There needs to be enough drag to maintain a minimum of 50m of aerial extent during high risk periods.

Braided rope or mono is best attached to a drag object like a float or cone or larger diameter rope.

The drag material or 'object' needs to be designed and constructed to reduce entanglement with setting line i.e. stream-line and seamless construction.

The join between the backbone and drag rope is a "catch point", ensure its streamlined, whip/tuck and wrap this join.

Drag "rope" section or float/cone etc

Setting

Long Line

Recommended Streamer Materials:

- Bright coloured rubber or plastic tubing
- Rigid, stiff tape or cord connected in a manner to reduce tangling with other streamers and the backbone

APPENDIX 5: BOTTLE SINK RATE TEST PROTOCOL

Purpose: Measure whether the slowest sinking hook reaches 5 m depth before the end of the tori line.

Longlines must be weighted so that the slowest sinking hook can be demonstrated to reach a depth of five metres (5 m) within the aerial extent of the tori line. The tori line needs to maintain 50 m aerial extent when fishing during high risk periods. You are required to conduct sink rate tests for the different longline gear configurations you use and record those results onboard. The tests must be carried out and calculated at least once per month and or whenever there is a gear change which may alter the sink rate and you've not recorded a bottle test for.

The bottle test is a simple way to measure your longline sink rate. Clip an empty plastic bottle onto the backbone when setting with a 5 m length of line between the bottle and the clip, when the bottle is pulled below the surface that indicates distance astern when the gear was at 5 m depth.

Consider doing the tests on a calm day while steaming out to the fishing grounds, in a similar depth using same gear set up. Rather than when you are fishing, (make sure there's very low risk of seabird captures) and set a few daylight lines (*don't need to have baited hooks*) bottle testing will be much easier, and you will have more time do it properly.

Preparation before the bottle test

- Get a plastic drink bottle, 500 ml to 1 lt 'water bottle' (a longer narrow bottle is much easy to see).
- Cut a 5 m piece of light-line and tie one end to the neck of the bottle and the other end to a shark clip.
- Pop open or remove the cap of the bottle and drill small hole in the base to allow water in and air out.
- Wrap the line around the bottle so that it can unwind freely when conducting the test.
- Have a stopwatch ready before the test and if doing tests at night, wrap reflective tape around the bottle and use a decent torch, 'spot-light' so see the bottle off in the distance as it sinks.

Undertaking a bottle test

- Record the vessel information before undertaking the test (e.g., setting speed, line weight size, aerial extent of tori line). When shooting, clip the bottle onto the mainline halfway between 2 weights, (usually the slowest sinking part of the line). Check Health and Safety measures and stay clear from the bottle-line when deployed.
- Do the test in good weather in the depth the gear is set up for; wait until the end weight is on the seabed. During the test you need to (1) record length of the tori line aerial extent, (2) record distance astern the bottle sinks. There are 2 ways of calculating your sink rate using the bottle-test method:
 - The easiest way, before sailing pull out your tori line and mark it at 40 m, 50 m, 60 m+ etc (these measurements need to be from the stern) when ready, clip the bottle to the mainline and use the tori line as a measuring-tool, watch when the bottle is pulled underwater in relation to your tori line aerial extent and record the distance.
 - The other option is the time-speed calculation method. Clip the bottle onto the mainline and start the stopwatch when the mainline leaves the vessel stern. Stop the stopwatch when the bottle is pulled underwater. Using the time it took along with the boat speed in the table below, lookup the distance astern the backbone reached 5m depth.
- Bottle tests will be varied due to changing environmental conditions and other factors so do a few tests to get consistent results you may require changes to gear the set-up, until you manage to sink the gear to the required level, record all test results on the below form.
- Having trouble meeting the required sink depth before the tori line reaches the water surface, you need to make changes to improve your sink rate; add larger weights, or add more weights at closer intervals, improve tori line aerial extent performance and or reduce floatation, perhaps extend the length of the float-ropes. (Reducing boat speed will help improve the sink rate but you will also reduce your tori line aerial extent) likely you may need to do some or all of these to reach the standard.



Bottle test look up table to find distance travelled from speed and time taken

Lookup the time taken along the top row and follow that column down until it matches setting speed (through the water) on the left-hand column. The figure in the box gives the distance travelled before the bottle sank.

Speed	Time (seconds)																														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
2 1.03	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	19	20	21	22	23	24	25	26	27	28	29	30	31
2.5 1.29	0	1	3	4	5	7	8	9	11	12	13	15	16	17	19	20	21	22	24	25	26	28	29	30	32	33	34	36	37	38	40
3 1.54	0	2	3	5	6	8	9	11	12	14	15	17	19	20	22	23	25	26	28	29	31	32	34	35	37	39	40	42	43	45	46
3.5 1.8	0	2	4	5	7	9	11	13	14	16	18	20	22	23	25	27	29	31	32	34	36	38	40	41	43	45	47	49	50	52	54
4 2.06	0	2	4	6	8	10	12	14	16	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51	54	56	58	60	62
4.5 2.32	0	2	5	7	9	12	14	16	19	21	23	25	28	30	32	35	37	39	42	44	46	49	51	53	56	58	60	63	65	67	69
5 2.57	0	3	5	8	10	13	15	18	21	23	26	28	31	33	36	39	41	44	46	49	51	54	57	59	62	64	67	69	72	75	77
5.5 2.83	0	3	6	8	11	14	17	20	23	25	28	31	34	37	40	42	45	48	51	54	57	59	62	65	68	71	74	76	79	82	85
6 3.09	0	3	6	9	12	15	19	22	25	28	31	34	37	40	43	46	49	52	56	59	62	65	68	71	74	77	80	83	86	90	93
6.5 3.34	0	3	7	10	13	17	20	23	27	30	33	37	40	43	47	50	54	57	60	64	67	70	74	77	80	84	87	90	94	97	100
7 3.6	0	4	7	11	14	18	22	25	29	32	36	40	43	47	50	54	58	61	65	68	72	76	79	83	86	90	94	97	101	104	108

Speed	Time (seconds)																														
	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
knots (m/s)																															
2 1.03	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	54	55	56	57	58	59	60	61	62
2.5 1.29	40	41	42	44	45	46	48	49	50	52	53	54	56	57	58	60	61	62	64	65	66	67	69	70	71	73	74	75	77	78	79
3 1.54	46	48	49	51	52	54	56	57	59	60	62	63	65	66	68	69	71	73	74	76	77	79	80	82	83	85	86	88	90	91	93
3.5 1.8	54	56	58	59	61	63	65	67	68	70	72	74	76	77	79	81	83	85	86	88	90	92	94	95	97	99	101	103	104	106	108
4 2.06	62	64	66	68	70	72	74	76	78	80	82	84	86	88	91	93	95	97	99	101	103	105	107	109	111	113	115	117	119	121	123
4.5 2.32	69	72	74	76	79	81	83	86	88	90	93	95	97	100	102	104	106	109	111	113	116	118	120	123	125	127	130	132	134	137	139
5 2.57	77	80	82	85	87	90	93	95	98	100	103	105	108	111	113	116	118	121	123	126	129	131	134	136	139	141	144	147	149	152	154
5.5 2.83	85	88	91	93	96	99	102	105	108	110	113	116	119	122	124	127	130	133	136	139	141	144	147	150	153	156	158	161	164	167	170
6 3.09	93	96	99	102	105	108	111	114	117	120	123	127	130	133	136	139	142	145	148	151	154	157	161	164	167	170	173	176	179	182	185
6.5 3.34	100	104	107	110	114	117	120	124	127	130	134	137	140	144	147	150	154	157	161	164	167	171	174	177	181	184	187	191	194	197	201
7 3.6	108	112	115	119	122	126	130	133	137	140	144	148	151	155	158	162	166	169	173	176	180	184	187	191	194	198	202	205	209	212	216

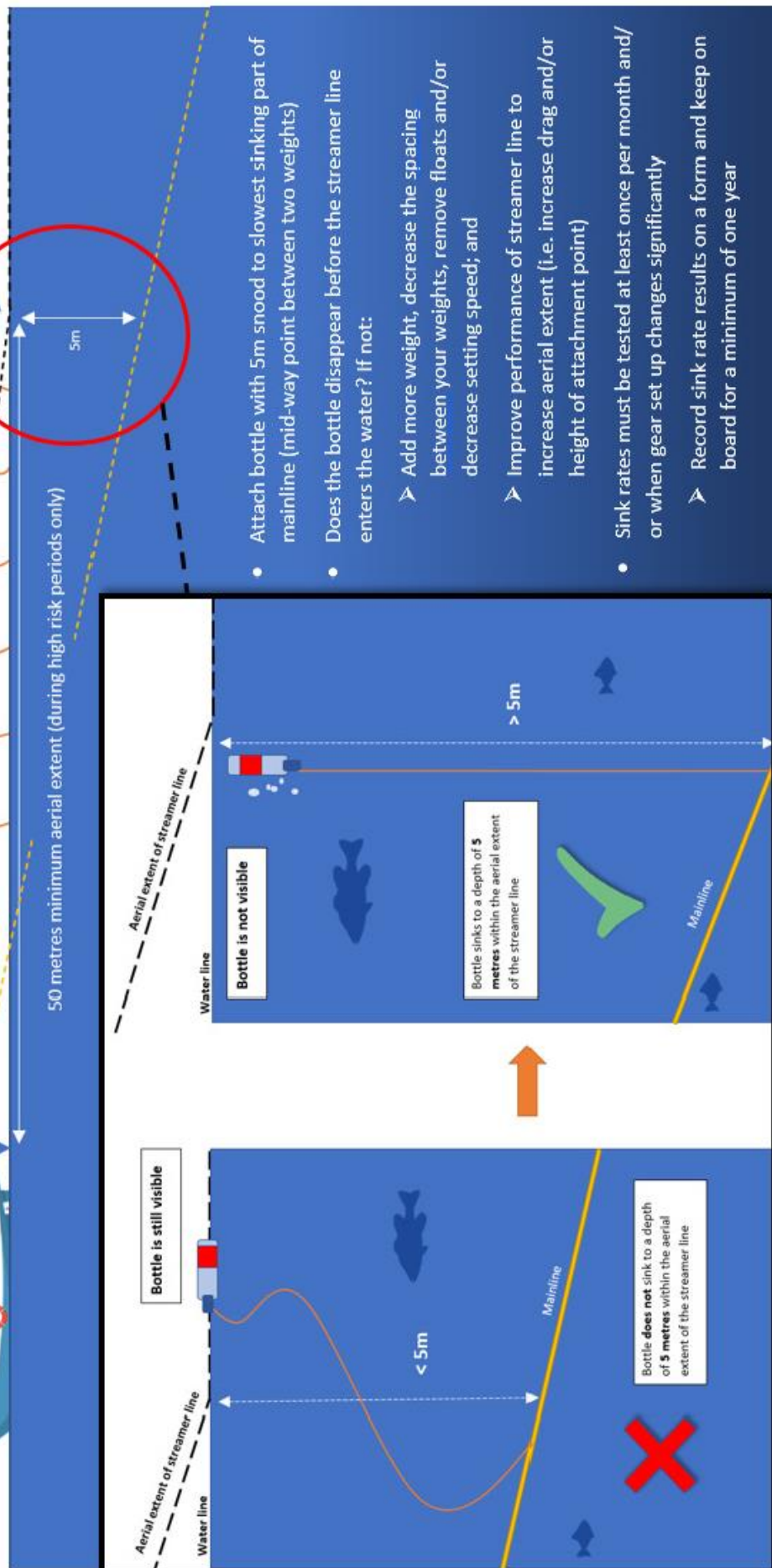
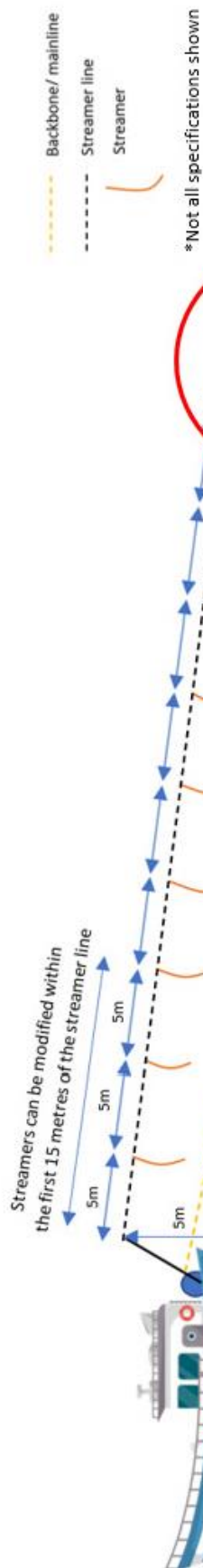
Bottle Sink Rate Test Record Sheet

Date dd/mm/yy	Time hh:mm NZST	Set test number	Avg Line weighting config kg/m	Float size (mm) config (m)	Back bone diameter mm	Setting speed knots	Aerial extent of the tori line (m)	Time to sink seconds or distance from stern it sank	Did the bottle sink within aerial extent? Y/N/U	Comments Weather, gear-set type, night or day test, bird activity etc.
20/09/20	03:45	1	6kg / 80m	200mm / 40m	2.2	4.5	55	23sec -53m	Y	Nice day, set 4000m line with the tide, day- light test, Little bird activity, bottle sank few meters before tori line hit the water

(Note: if a test fails, you must change the configuration of you gear and conduct another test until you meet the requirement. You will need at least 3 successful tests to show consistently for each gear configuration / species-target configuration

Streamline and Bottle tests – The Basics

August 2021



APPENDIX 6: BLL OP OBSERVER REVIEW FORM

Deepwater BLL OPs Observer Review Form



Fisheries New Zealand
Tini a Tangaroa



deepwater
group

Trip Number	Vessel Name	Observer name	Trip start date	Trip end date	No. Sets
			/ /	/ /	

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 (except Items 3, 4 & 12) then please make detailed comments on the reverse.

Item 1. Did the vessel carry a copy of the DWG BLL Operational Procedures (OP) and the Protected Species Risk Management Plan (PSRMP) that was made available upon request? ☐

Item 2. Were the senior crew familiar with the contents of the BLL – OP and PSRMP? ☐

Item 3. Were any seabird or marine mammal 'trigger-points' activated during the trip?
(if Y record details of the triggers and the action taken by the vessel) ☐

Item 5. Were there any changes in crew behaviour, fishing activity, mitigation devices deployed and/or gear used following 'trigger point' events or during 'high risk' periods
(e.g. full moon, multiple capture events). ☐

Item 4. 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) ☐

Mitigation device

Item 6. Was a tori line used for the entirety of all sets? ☐

Item 7. When deployed, did the tori line aerial extent appear to be at least 50m?
(Please specify aerial extent in comments) ☐

Item 8. Were 'fit and proper'* streamers spaced at a maximum distance of 5 m apart along the entire aerial extent of the tori line? ☐

Item 9. Did the vessel carry a spare tori line or sufficient parts to construct a second tori line if required? ☐

Item 11. Could the tori line be adjusted or repositioned so that streamers could be positioned over the backbone to suit varying conditions? ☐

Item 12. Were any other mitigation devices used ('brickle curtain', water cannon etc.)?
(if Y record details in the comments) ☐

Fish Waste & Bait Management

Item 14. Was all fish waste (including bait scraps) retained on board during setting? ☐

Item 15. Was the discharge from the vessel during hauling managed/controlled as per PSRMP?
(i.e. no continuous discharge with all offal/used bait held & batch discarded or meal) ☐

Item 16. Was appropriate hauling mitigation used if discarding alive fish or fish >30cm on the same side of hauling station? ☐

Item 17. Did baiting machines achieve a high baiting percentage and ensure all unhooked bait was retained on board and not lost overboard during setting (autoline only)? ☐

Item 18. Was the use of totally frozen bait avoided? ☐

General procedures

Item 19. Were all plastics (including fishing plastics such as snoods, carton strapping etc.) retained on board? ☐

Item 13. Did the vessel keep records of any sink rate tests conducted? (i.e. bottle tests or TDR tests) ☐

Item 20. Did lines sink to a depth of 5 m within the aerial extent of the streamer line? (include comments) ☐

Item 21. Were spot lights shining directly astern controlled/dimmed during night setting? ☐

Item 22. Were all seabird or marine mammal captures recorded in ERS? ☐

Item 23. Were seabirds or marine mammals caught and released alive handled with due care? ☐

Item 24. Any other comments? ☐

*fit and proper streamers should be brightly coloured and of a sufficient length to provide a suitable deterrent to seabirds. The attachment point should also be >5m above the surface of the water.

Please make a detailed comment for each item when required.

APPENDIX 7A: FNZ FACTSHEETS – REQUIREMENTS FOR VESSELS BETWEEN 7 – 20 M



Fisheries New Zealand

Tini a Tangaroa



Fisheries (Seabird Mitigation Measures – Bottom longlines) Circular 2021 Requirements for vessels between 7 and 20 metres (excl. autoliners)

The development of the National Plan of Action for Seabirds 2020 prompted Fisheries New Zealand and the Department of Conservation, in conjunction with stakeholders, to formulate a set of non-regulatory Mitigation Standards for bottom longline vessels to reduce risks to seabirds. The Fisheries (Seabird Mitigation Measures – Bottom Longlines) Circular 2021 better aligns the mandated measures with the 'best practice' mitigation standards.

Streamer Line Specifications

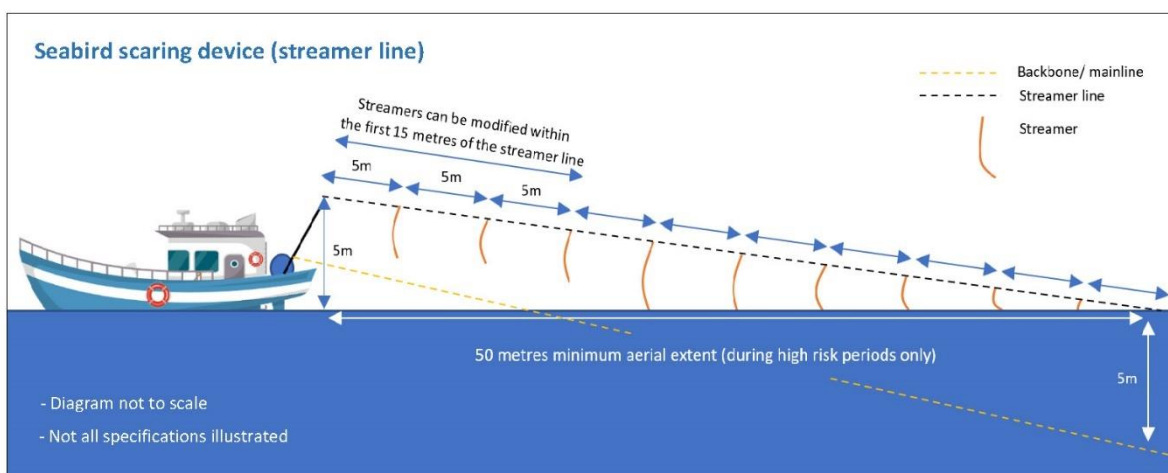
All bottom longline vessels that are between 7 and 20 metres in overall length (excl. autoliners) must deploy a streamer line during the setting of bottom longlines that meet the following specifications:

- The streamer line must be attached to the vessel at a point 5 metres above the surface of the water in the absence of swell.
- The streamer line must be attached such that when deployed, baits are protected by the streamers, even in a crosswind.
- Streamers must be brightly coloured.
- Streamers must be spaced a maximum of 5 metres apart, beginning no more than 5 metres from the stern of the vessel and extending the full aerial length of the streamer line.

- When deployed, each of the streamers must reach the sea surface in the absence of wind and swell. Streamer length will vary depending on the height of their attachment point above the water.
- However, streamers on the first 15 metres of the streamer line may be modified to avoid tangling with the backbone as long as a minimum length of 1 metre is maintained.
- The streamer line must achieve a minimum aerial extent of 50 metres when fishing during high risk periods (i.e. during daylight hours or for 3 days either side of a full moon).¹
- **Note:** Vessels using the method of Dahn lining are not required to use a streamer line.

Fish Waste Management

During hauling of bottom longlines, any live fish or dead fish (those which can be legally discarded) that are larger than 30 centimetres in fork length may be discharged on the side of the vessel where the hauling station is located, as long as a hauling mitigation device is deployed. A hauling mitigation device physically deters or blocks seabirds from flying or swimming directly into the area where lines are being hauled, without causing harm to birds. All other fish waste must be discarded on the opposite side of hauling station.



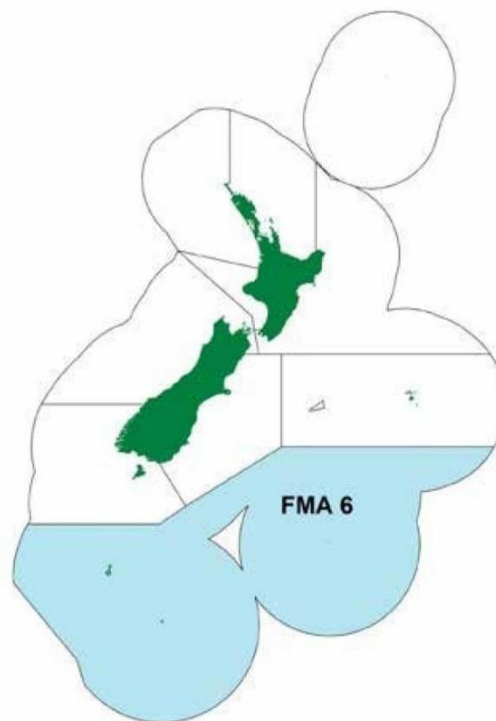
¹ There is no aerial extent requirement outside of high risk periods

Line Weighting Regime

When bottom longlining, lines must be weighted so that the slowest sinking hook¹ can be demonstrably shown to reach a depth of 5 metres within the protection of the aerial extent of the streamer line.² Sink rates must be measured at regular intervals (defined as once per calendar month or when gear setup significantly changes) and the information recorded and retained for one year. This data must be made available upon request by Fisheries Compliance Officers and Observers.

Fishers can measure sink rates either through bottle tests or using time-depth recorders (TDRs). While TDRs are considered to provide more accurate information, they are more expensive. Bottle tests provide a cheap and easy way of measuring sink rates. A bottle test is conducted by clipping an empty biodegradable bottle³ to the mainline using rope/monofilament line of a known length. Once the bottle has been pulled underwater, the mainline will have sunk to a depth equal to the length of the rope/monofilament line. By measuring the time it takes for the bottle to sink, setting speed and aerial extent of the streamer line, it is possible to calculate the sink rate of the mainline and determine whether the desired depth was reached within the aerial extent of the streamer line. Materials on measuring sink rates have been developed by Fisheries Inshore New Zealand and Department of Conservation Liaison Officer Programme ([bottle test guidelines](#)).

The requirements for line weighting are proposed as an intermediary solution that enables fishers to continue their operations with minimal impacts on seabirds while additional data is collected on sink rates of hooks using various gear set ups. Once more data is available, these regulations will be revisited and a more permanent solution developed, in conjunction with stakeholders.



Area Specific Line Weighting

All bottom longline vessels operating in FMA 6 (Sub-Antarctic) between 1 November and 31 May must use integrated weight lines (IWL) with a lead core of at least 50 grams per metre. This is to reduce the risk of seabird captures during the seabird breeding season when birds are foraging more aggressively to feed their chicks. Evidence has shown that the use of integrated weight lines may reduce the incidental capture of seabirds and since many vessels that are active in the area already utilize IWL, the impact of requiring this gear is considered low.

¹ For the purpose of the Bottom Longline Circular 2021, the slowest sinking hook means the mid-way point between two weights near the centre of the line.

² Vessels using the method of Dahn lining do not have to meet the sink rate requirement.

³ Fisheries New Zealand encourages the use of biodegradable bottles and asks that care is taken to retrieve bottles following testing. Biodegradable water bottles can be found at [Compostable Bottle, Bottle Made From Plants: For The Better Good](#).

APPENDIX 7B: FNZ FACTSHEETS – SHARK LANDING AND REPORTING



Fisheries New Zealand

Tini a Tangaroa



Photo: Mike Bhana.

Fact Sheet 1/4

Conservation and management of New Zealand sharks

1

Over 113 species of sharks have been reported in New Zealand waters. Sharks are now known to be an important part of marine ecosystems and New Zealand's *National Plan of Action – Sharks* (available at www.mpi.govt.nz) recognises this.

SHARK FINNING BAN

From 1 October 2014, it is **ILLEGAL TO REMOVE THE FINS FROM A SHARK AND DISCARD THE BODY OF THE SHARK AT SEA**. The Fisheries (Commercial Fishing) Regulations 2001 require that any shark fins landed must be naturally attached to the body of the shark (see fact sheet 2).

The Regulations provide exceptions to the “fins attached” requirement for eight species of shark. These exceptions take two forms, the first is for blue shark and it allows the fins to be removed from the body but requires that the fins be attached to the trunk after processing (before landing). The second exception is for seven other QMS species, for which the fins may be landed separately but in accordance with a gazetted ratio (see fact sheet 3).

The management of individual shark species depends on Note that you are not required to land any fins.

Approach	Species	
Fins naturally attached	Spiny dogfish	SPD
	All non-QMS species	
Fins artificially attached	Blue shark	BWS
Ratio	Elephant fish	ELE
	Ghost shark	GSH
	Mako shark	MAK
	Pale ghost shark	GSP
	Porbeagle shark	POS
	Rig	SPO
	School shark	SCH

FOR MORE INFORMATION

Fact sheet 2 – Landing sharks with fins attached

Fact sheet 3 – Landing shark fins subject to a ratio

Fact sheet 4 – Requirements for returning sharks to the sea (Schedule 6)

A copy of the regulations is available at: <http://legislation.govt.nz>

the scale of catch, as well as other factors such as how vulnerable they are to fishing. You are likely to come across the following categories –

• QUOTA MANAGEMENT SPECIES

–Blue shark	BWS
–Elephant fish	ELE
–Ghost shark	GSH
–Mako shark	MAK
–Pale ghost shark	GSP
–Porbeagle shark	POS
–Rig	SPO
–School shark	SCH
–Spiny dogfish	SPD

Nine species of shark are managed under the Quota Management System (QMS). Catches of these species must be retained like any other QMS species, unless they are listed on Schedule 6 of the Fisheries Act 1996. A separate fact sheet is available explaining the conditions under which Schedule 6 applies and providing information on the appropriate recording of Schedule 6 releases (see fact sheet 4).

• NON-QUOTA SPECIES

The remainder of shark species are not managed under the QMS. Reporting obligations still apply for these species, but they do not have to be retained and landed.

You are encouraged to use best practice handling methods to release sharks alive wherever possible.

The content of this Fact Sheet is information only. The requirements are set out in the Fisheries (Commercial Fishing) Regulations 2001 and the *Fisheries (Shark Fin to Greenweight Ratios) Circular 2014*. The Ministry for Primary Industries does not accept any responsibility or liability for any error of fact or opinion, nor any consequences of any decision based on this information.

1

Conservation and management of New Zealand sharks

- **PROTECTED SPECIES** – catches of these species both in the EEZ and on the high seas cannot be retained by law, but all catches must be reported on the “non-fish species or protected fish species catch reports”:

– Basking shark	BSK
– Great white shark (White pointer shark)	WPS
– Oceanic whitetip shark	OWS
– Deepwater nurse shark	ODO
– Whale shark	WSH

- **CITES-LISTED SPECIES NOT OTHERWISE PROTECTED:**

– Porbeagle shark	POS
– Smooth, scalloped and great hammerhead sharks	HHS
– Shortfin mako shark	MAK

Porbeagle, hammerhead, and more recently mako sharks have been listed in Appendix II of the Convention on International Trade in Endangered Species. Any landings from the high seas now require a “CITES introduction from the sea” permit before bringing any sharks into NZ fisheries waters. Exports of these sharks or their products now requires a “CITES export/re-export” permit.

Note that sharks caught in the New Zealand EEZ but not exported are not subject to CITES regulation. The CITES documentation process is administered by the Department of Conservation. For more information see <http://www.doc.govt.nz/cites>

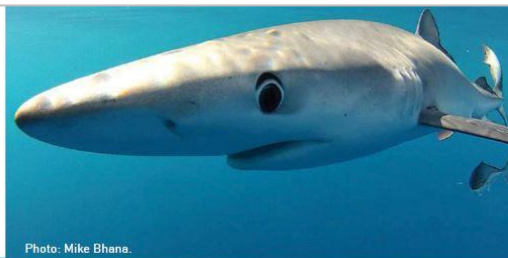


Photo: Mike Bhana.

Landing sharks with fins attached

The Fisheries (Commercial Fishing) Regulations 2001 require that for all non-quota management system (QMS) species, spiny dogfish, and blue shark, any fins to be landed must be attached to the remainder of the shark.

Blue shark

If you are planning to land the fins of any blue shark they must be attached to the trunk of the shark.

If you are retaining blue shark fins, you may land the shark either green (whole) or as the principal product state of “**SHARK FINS ATTACHED**” (SFA). This state is described as the shark being processed to the dressed state (see Figure 1 over the page) and then the fins re-attached by some artificial means. This includes (but is not limited to) stitching them on, or storing both the dressed trunk and the fins in the same bag (one shark per bag).

This rule will allow the small fishery for blue shark meat to continue, by allowing processing at sea to maximise the value of the fish, but still allowing for retention of the fins.

Note that you are not required to land the fins; you may land a different principal product state of blue shark. It is only if you wish to retain the fins that you must land it in either the “**SHARK FINS ATTACHED**” state or green. You are allowed to return unwanted blue shark to the sea under Schedule 6 provisions (see fact sheet 4).

Spiny dogfish and all non-QMS species

For spiny dogfish and non-QMS species, any fins landed must be **naturally** attached to the remainder of the shark. This means that there must be some portion of uncut skin connecting the fins to the body. If you are retaining fins, you may land these sharks either as green (whole) or as the principal product state “**SHARK FINS ATTACHED**”. This is defined for spiny dogfish and all non-QMS species as the fish being processed to the headed and gutted state with the primary fins naturally attached (i.e. the pectoral fins, dorsal fins and some or all of the caudal (tail) fin).

You may cut the fins to allow them to be folded flat against the fish, or to allow for bleeding, but they must remain naturally attached to the trunk of the shark if they are being landed.

Note that this does not preclude landing another primary landed state. It is only if you wish to retain the fins that you must land it in the “**SHARK FINS ATTACHED**” state.

Non-QMS species can also be legally returned to the sea (dead or alive) if you don't wish to retain them (reported on disposal reports under disposal code “D”). Spiny dogfish can be returned (dead or alive) and reported on disposal reports under disposal code “M”.

FOR MORE INFORMATION

Fact sheet 1 – Conservation and management of New Zealand sharks

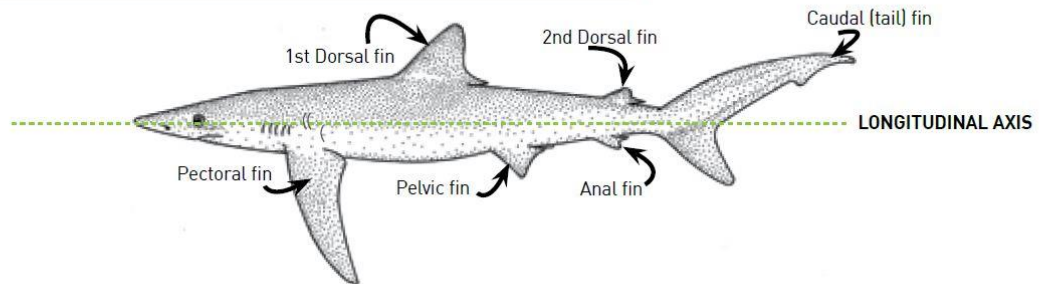
Fact sheet 3 – Landing shark fins subject to a ratio

Fact sheet 4 – Requirements for returning sharks to the sea (Schedule 6)

A copy of the regulations is available at: <http://legislation.govt.nz>

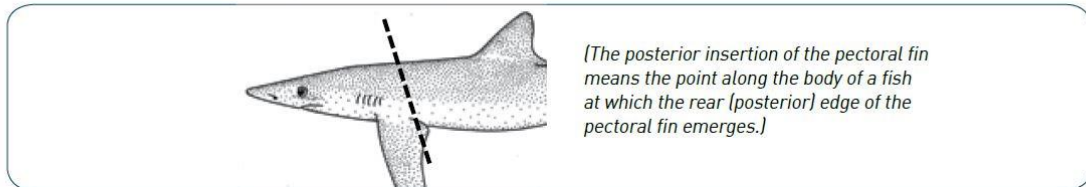
The content of this Fact Sheet is information only. The requirements are set out in the Fisheries (Commercial Fishing) Regulations 2001 and the Fisheries (Shark Fin to Greenweight Ratios) Circular 2014. The Ministry for Primary Industries does not accept any responsibility or liability for any error of fact or opinion, nor any consequences of any decision based on this information.

FIGURE 1: BLUE SHARK (BWS) DRESSED (DRE)

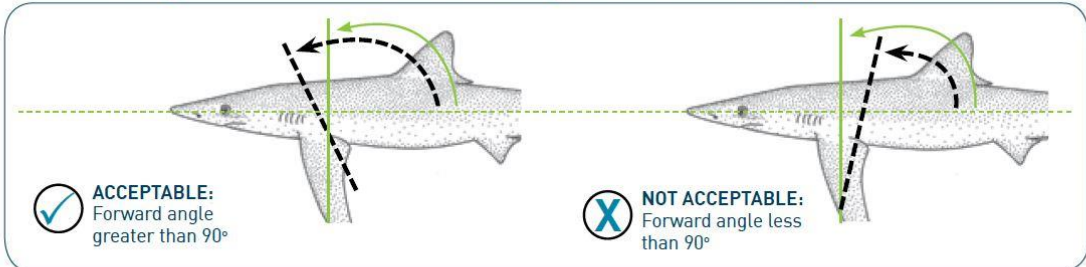


The body of a fish from which the head, gut and fins have been removed with:

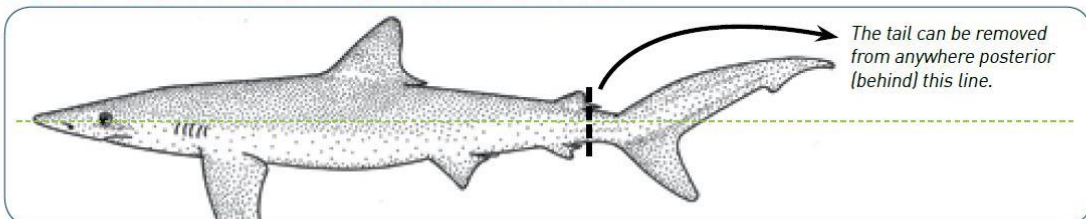
1) the anterior cut being a straight line passing immediately behind the posterior insertions of both pectoral fins.



2) the forward angle of the anterior cut not less than 90 degrees in relation to the longitudinal axis of the fish.



3) no part of the tail cut forward of the posterior base of the anal fin.



4) the belly-flap may be removed by a cut, no part of which is dorsal to the cartilaginous backbone.

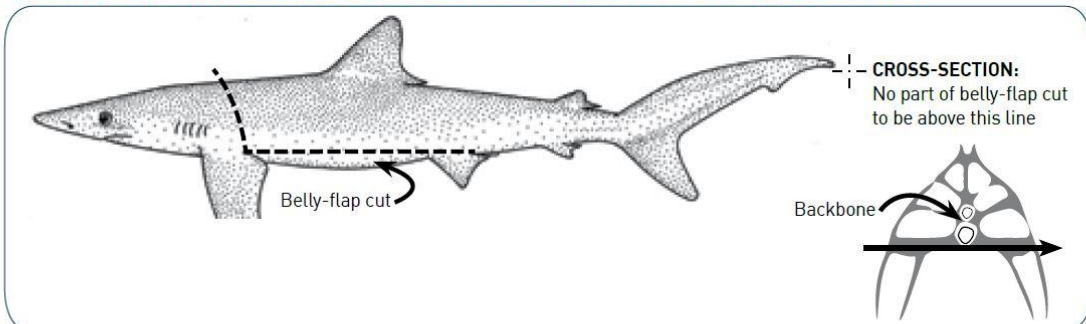




Photo: Mike Bhana.

Landing shark fins subject to a ratio

3

The Fisheries (Commercial Fishing) Regulations 2001 prohibit shark finning and require that any shark fins landed must be naturally attached to the remainder of the shark (or artificially in the case of blue shark). However, an exception to the fins attached requirement is provided for seven QMS species to allow at-sea processing to continue.

These seven QMS species are:

- Elephant fish ELE
- Ghost shark GSH
- Mako shark MAK
- Pale ghost shark GSP
- Porbeagle shark POS
- Rig SPO
- School shark SCH

For these species, the weight of all fins landed must not exceed a specified percentage of the greenweight of the shark. For example, if the ratio for a particular species is set at 3.5, if sharks are landed that have a total greenweight of 100 kgs, the fins of that species landed cannot weigh more than 3.5 kgs. They may weigh less than that. The ratios will be applied to landings on a trip-by-trip basis.

The species which may have fins landed separately, the specific ratios for each species, and the "primary fins" which have been used to set the ratios are defined in a *Shark Circular* which can be found at: www.mpi.govt.nz

Note that landing other fins may result in being over the gazetted ratio for a species.

How will the ratio work?

For species where you normally process the catch at sea and keep both a trunk (for example, dressed) and also

the fins, not a lot should change, but you will need to **STORE AND LAND THE FINS SEPARATELY BY SPECIES**. Fins must be landed wet. This will be a legal requirement from 1 October 2014, and will allow monitoring to make sure you are not retaining any more shark fins than the trunks they come from.

Future reviews of ratios will be based on direct sampling over the coming years.

For the main inshore shark species, the ratios have been set so that if you follow normal processing practices, you shouldn't exceed the ratio with your landings of shark fins. The ratios for each species have been set based on statistical analysis of at-sea sampling data. However, you will need to monitor your landings more closely so you can be confident you aren't exceeding the weight ratio, especially as you become familiar with the new rules.

FOR MAKO AND PORBEAGLE, there are some differences in cut and which of the fins are retained across different fleets. **THE RATIO IS SET BASED ON RETAINING THE WHOLE TAIL (CAUDAL) FIN**. This has been done to try and avoid any accidental non-compliance (which could occur if the ratio was set lower), but you will still

need to monitor your landings more closely to ensure you don't exceed it, especially if your vessel normally lands the whole tail. You can choose to land just the lower tail lobe. Close monitoring will occur to make sure no high-grading is occurring within the ratio.

Over the next two years, there will be ongoing monitoring and continued data collection to ensure that the ratios are set appropriately. Monitoring and enforcement will differentiate between slight variation around the ratios, which is to be expected, and a consistent trend of too many shark fins compared to shark bodies.

It is your responsibility to ensure you are within the ratio, but if you think the ratio is set incorrectly for a particular species, talk with MPI and/or a commercial stakeholder organisation such as Fisheries Inshore.

If you land any fins, you will need to report the actual weight of the fins for each species in the appropriate part of landing reports.

Retaining the fins from one shark and the trunk from a different shark (high grading) is an offence under the shark finning regulations.

FOR MORE INFORMATION

Fact sheet 1 – Conservation and management of New Zealand sharks

Fact sheet 2 – Landing sharks with fins attached

Fact sheet 4 – Requirements for returning sharks to the sea (Schedule 6)

A copy of the regulations is available at: <http://legislation.govt.nz>

The content of this Fact Sheet is information only. The requirements are set out in the Fisheries (Commercial Fishing) Regulations 2001 and the *Fisheries (Shark Fin to Greenweight Ratios) Circular 2014*. The Ministry for Primary Industries does not accept any responsibility or liability for any error of fact or opinion, nor any consequences of any decision based on this information.



Photo: Mike Bhana

Requirements for returning sharks to the sea (Schedule 6)

4

Schedule 6 of the Fisheries Act 1996 sets out QMS species that may be returned to the sea, so long as the specified conditions are met.

As part of the regulatory package to ban shark finning, MPI has made changes to Schedule 6 for several species of shark to allow them to be returned to the water. This provides a legal option for fishers who accidentally catch a shark for which they have no market.

In many cases, the best option is to try and avoid catching the sharks altogether if they are not marketable species. There may be different ways to avoid shark catches, depending on the species and the fishery. Some research is currently being done for surface longline fisheries.

Schedule 6 returns to the sea provide another option if you have already caught the shark. This fact sheet has been produced to explain the Schedule 6 provisions for shark species and detail the associated reporting requirements.

Live release only

The following species of sharks may only be returned to the sea **ALIVE**, if they are **LIKELY TO SURVIVE** and returned as soon as practicable:

- Rig SPO
- School shark SCH

Any returns of these species must be reported on disposal reports under disposal code "X" and will not be counted against your Annual Catch Entitlement (ACE).

Live or dead – pelagic sharks

For the following species:

- Mako shark MAK
- Porbeagle shark POS
- Blue shark BWS

Sharks may be returned to the sea **ALIVE**, if they are **LIKELY TO SURVIVE** and returned as soon as practicable. Any sharks returned to the sea **ALIVE** must be reported on disposal reports under disposal code "X" and will not be counted against ACE.

As of 1 October 2014, these sharks may also be returned to the sea if they are **DEAD** or **UNLIKELY TO SURVIVE** provided they are correctly reported. Any sharks returned to the sea dead or unlikely to survive must be reported on disposal reports under disposal code "Z". These returns will be counted against ACE. You need to accurately estimate the weight of the sharks discarded this way.

Live or dead – spiny dogfish

Spiny dogfish may be returned to the sea either live or dead. There is no differentiation between live and dead fish. Any spiny dogfish returned to the sea must be reported on disposal reports under disposal code "M" and will be counted against ACE.

FOR MORE INFORMATION

Fact sheet 1 – Conservation and management of New Zealand sharks

Fact sheet 2 – Landing sharks with fins attached

Fact sheet 3 – Landing shark fins subject to a ratio

A copy of the regulations is available at: <http://legislation.govt.nz>

The content of this Fact Sheet is information only. The requirements are set out in the Fisheries (Commercial Fishing) Regulations 2001 and the Fisheries (Shark Fin to Greenweight Ratios) Circular 2014. The Ministry for Primary Industries does not accept any responsibility or liability for any error of fact or opinion, nor any consequences of any decision based on this information.

Requirements for returning sharks to the sea (Schedule 6)

SUMMARY OF OPTIONS BY SPECIES OF SHARK

SPECIES		LIVE RETURN	Destination Code	Balanced with ACE	DEAD RETURN	Destination Code	Balanced with ACE
School shark	SCH	Yes	X	No	Only observer- authorised discards	J	Yes
Rig	SPO	Yes	X	No	Only observer- authorised discards	J	Yes
Mako shark	MAK	Yes	X	No	Yes	Z	Yes
Porbeagle shark	POS	Yes	X	No	Yes	Z	Yes
Blue shark	BWS	Yes	X	No	Yes	Z	Yes
Spiny dogfish	SPD	Yes	M	Yes	Yes	M	Yes

APPENDIX 8: FISHERIES (SEABIRD MITIGATION MEASURES - BOTTOM LONGLINES) CIRCULAR 2021

NEW ZEALAND GAZETTE

Fisheries (Seabird Mitigation Measures—Bottom Longlines) Circular (No. 2) 2021 (Notice No. MPI 1375)

This circular is issued by the Chief Executive of the Ministry for Primary Industries under Regulation 58A of the Fisheries (Commercial Fishing) Regulations 2001.

Circular

1. Title

This circular is the Fisheries (Seabird Mitigation Measures—Bottom Longlines) Circular (No. 2) 2021.

2. Commencement and Application

This circular comes into force on **1 October 2021**.

This circular applies to the operator or master of a vessel whose responsibilities for compliance are described in regulation 58B of the Fisheries (Commercial Fishing) Regulations 2001.

3. Interpretation

In this circular, unless the context otherwise requires,—

Act means the Fisheries Act 1996

aerial extent means the section of the streamer line backbone running from the vessel stern to where the backbone of the streamer line enters the water

bottom longline means a line to which 7 or more hooks (whether baited or not) are attached, and is sunk using weights

hauling means the period from when line retrieval commences to when all the hooks are onboard

hauling mitigation device is any device that physically deters or blocks seabirds from flying or swimming directly into the area where lines are being hauled, without causing harm to birds

high risk period means during daylight hours (0.5 hours before nautical dawn and 0.5 hours after nautical dusk) or during a full moon and three days either side of a full moon

nautical dawn means the time at sunrise when the centre of the sun is at a depression angle of 12 degrees below the ideal horizon for the location of fishing

nautical dusk means the time at sunset when the centre of the sun is at a depression angle of 12 degrees below the ideal horizon for the location of fishing

offal means parts of a fish that are usually discarded, including minced parts

set, in relation to a bottom longline, means releasing the bottom longline into the water.

streamer line means a type of seabird-scaring device, also known as a tori line.

For the avoidance of doubt, if a term that is used in this circular is defined in the Act or Fisheries (Commercial Fishing) Regulations 2001, that term carries the same meaning as in those provisions.

4. Streamer Line Required

Any vessel seven metres or greater in overall length using bottom longlines as a method of fishing must—

- a. carry a streamer line on board the vessel; and
- b. permit inspection of the streamer line at any reasonable time by a fisheries officer or an observer.

Vessels which exclusively use the method of Dahn lining are not required to carry a streamer line.

5. Use of Streamer Line Required During Setting of Bottom Longlines

A streamer line must be used on vessels seven metres or greater in overall length during the setting of bottom longlines, in accordance with clause 6. Vessels using the method of Dahn lining are not required to use a streamer line.

6. Streamer Line Specifications

1. For vessels utilizing automatic baiting machines, and those 20 metres or greater in overall length, the streamer line must meet the following specifications:

- a. the streamer line must be attached to the vessel so that when deployed the baits are protected by the streamer line, even in a crosswind; and
- b. the streamer line must be a minimum of 150 metres in length; and
- c. the streamer line must achieve a minimum aerial extent of 50 metres when fishing during high risk periods; and

- d. streamers must be brightly coloured; and
- e. streamers must be spaced at a maximum of five metres apart, beginning not more than five metres from the stern of the vessel and extending along the full aerial extent of the line; and
- f. when deployed, each of the streamers must reach the sea surface in the absence of wind and swell. Streamer length will therefore vary depending on the height of their attachment point above the water; and
- g. despite subclause 1(f), streamers may be shortened along the first 15 metres of the streamer line, however streamers must be maintained at a minimum length of one metre.
- h. the streamer line must be suspended from a point on the vessel at least five metres above the water in the absence of swell.

2. For vessels that are seven to 20 metres in overall length, the streamer line must meet the following specifications:

- a. the streamer line must be attached to the vessel so that when deployed the baits are protected by the streamer line, even in a crosswind; and
- b. the streamer line must achieve a minimum aerial extent of 50 metres when fishing in high risk periods; and
- c. streamers must be brightly coloured; and
- d. streamers must be spaced at a maximum of five metres apart, beginning not more than five metres from the stern of the vessel and extending along the full aerial extent of the line; and
- e. when deployed, each of the streamers must reach the sea surface in the absence of wind and swell. Streamer length will therefore vary depending on the height of their attachment point above the water; and
- f. despite subclause 2(e), streamers may be shortened along the first 15 metres of the streamer line, however streamers must be maintained at a minimum length of one metre.
- g. the streamer line must be suspended from a point on the vessel at least five metres above the water in the absence of swell.

3. The specifications in subclauses (1) and (2) do not apply to additional or secondary seabird-scaring devices fishers may choose to use (such as a second tori or streamer line).

7. Restrictions on Use of Bottom Longlines

- 1. A bottom longline must not be set in New Zealand waters to take fish, aquatic life, or seaweed unless line weighting is used in accordance with clause 8.
- 2. A bottom longline must not be set to take fish, aquatic life, or seaweed between 1 November and 31 May in FMA 6 unless using an integrated weighted line with a lead core of at least 50 grams per metre.

8. Line Weighting

- 1. Bottom longlines must be weighted such that the slowest sinking hook can be demonstrably shown to reach a depth of five metres within the aerial extent of the streamer line under clause 6.
- 2. Sink rates must be measured at regular intervals (at least once per calendar month or when gear setup significantly changes) via bottle tests or time-depth recorders and the results documented and retained on the vessel for a minimum of one year. These records must be made available to fisheries officers and observers upon request.
- 3. Vessels that exclusively use the method of Dahn lining are not required to weight lines in accordance with subclause 1.

9. Restriction on Discharge of Offal or Fish While Setting and Hauling Bottom Longlines

- 1. Offal or fish must not be discharged during setting of bottom longlines.
- 2. Offal or fish may be discharged during the hauling of bottom longlines, but only from the side of the vessel that is opposite to the side on which the hauling station is located.
- 3. Subclause (1) does not apply to—
 - a. fish that are legally undersize; or
 - b. fish that are listed in Schedule 6 of the Act and that are likely to survive.
- 4. Despite subclause (2), during the hauling of bottom longlines, —
 - a. Patagonian toothfish may be discharged on the side of the vessel on which the hauling station is located; and
 - b. Any live fish and those whole dead fish greater than 30cm in (fork) length that can legally be discarded may be discharged on the side of the vessel on which the hauling station is located if a hauling mitigation device is

deployed.

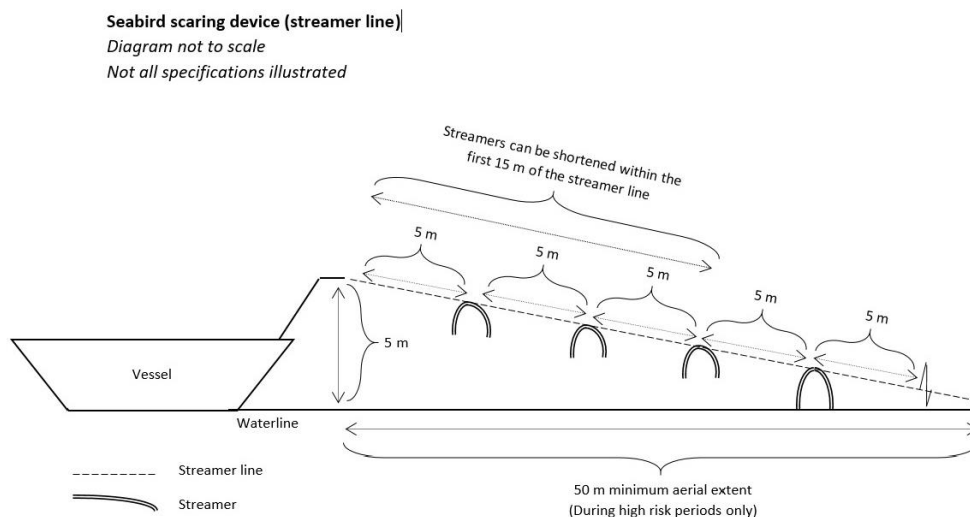
10. Revocation

Fisheries (Seabird Mitigation Measures—Bottom Longlines) Circular 2021 (Notice No. MPI 1366) is revoked ([New Zealand Gazette, 24 June 2021, Notice No. 2021-go2467](#)).

11. Schedule

1. The Schedule provides further guidelines on the design and deployment of streamer lines as seabird-scaring devices.
2. The Schedule is not part of the specifications.
3. If there is any inconsistency between the guidelines in the Schedule and the specifications, the specifications prevail.

Schedule



1. The streamer line needs to protect baited hooks from seabirds. This means that the streamer line should be positioned in such a way that streamers are flapping in an unpredictable fashion, above the area in which the baited hooks enter the sea, so that seabirds are deterred from attempting to take bait from the hooks. In order to achieve this even during cross-winds, it is expected an operator or master of a vessel will have to make adjustments to the configuration of the streamer line depending on the conditions.

2. It is generally recognised as best practice to maximise the aerial extent of the streamer line, because this maximises the area in which the baited hooks are protected from seabirds. Best practice would be to achieve an aerial extent of 100 metres or more. In order to maximise aerial extent, it is necessary to create tension in the streamer line. This can be achieved by—

- towing an object on the terminal end of the streamer line; or
- towing extra length of streamer line; or
- increasing the diameter of the in-water section of the streamer line.

3. In order to be effective at scaring seabirds away from the line of baited hooks, the streamer lines should not become tangled, either with each other or with the backbone. Each streamer shall be attached to the streamer line in a manner to prevent fouling of individual streamers with the streamer line, and to ensure individual streamers reach the waterline in the absence of wind or swell (except within the first fifteen metres where streamers can be shortened). Swivels or a similar device can be placed in the streamer line in such a way as to prevent streamers being twisted around the streamer line. Each streamer may also have a swivel or other device at its attachment point to the streamer line to prevent fouling of individual streamers.

4. Streamers are to be spaced at five-metre intervals along the aerial extent of the line. The total number of streamers in use will vary depending on how the line is configured. Streamers that are hanging in the water can be prone to tangling. Because the far end of the streamer line will frequently be in the water, it may not be desirable to have streamers the whole way down the line. However, it is important that streamers are present to deter birds from taking baited hooks all along the part of the line that remains above water, as outlined in the specifications.

5. To ensure streamers are visible to birds, they should stand out against the surroundings. Streamers should be made of brightly coloured fluorescent plastic tubing or other material. Bright colours such as red, yellow, orange, or pink are most effective during day setting. For night setting, the streamers should be of a colour that contrasts with the

surroundings. Colours such as blue and green are less likely to be effective, because they are less likely to be highly visible to birds.

6. A complete additional streamer line should be carried as a spare.

Dated at Wellington this 31st day of August 2021.

TIFFANY BOCK, Manager Deepwater Fisheries, Fisheries New Zealand.

Explanatory Note

This note is not part of the circular, but is intended to indicate its general effect.

This circular, which comes into force on 1 October 2021, is made under Regulation 58A of the Fisheries (Commercial Fishing) Regulations 2001 ("Regulations"). It is made by the Manager Deepwater Fisheries, of the Ministry for Primary Industries pursuant to an authority delegated under the Public Service Act 2020.

This circular revokes the Fisheries (Seabird Mitigation Measures—Bottom Longlines) Circular 2021 (Notice No. MPI 1366) and replaces it. The revocation and replacement is to make some minor changes to Clauses 7 and 8 to clarify that line weighting must be used at any time a bottom longline is set, and that line weighting does not apply to vessels that are exclusively fishing by Dahn lining.

This circular sets out mandatory mitigation measures that apply to commercial fishers using the method of bottom longlining. The measures are designed to mitigate the effect of fishing-related seabird mortality. The circular requires that, when setting bottom longlines, commercial fishers—

- use and configure streamer lines in accordance with the specifications prescribed in the circular; and
- weight lines in order to achieve five-metre sink depth within the aerial extent of the streamer line.

Streamer lines meeting the requirements of this circular are approved seabird-scaring devices for the purposes of Regulation 58(1) of the Regulations. The Schedule sets out best practice guidelines for—

- the configuration and use of streamer lines.

The guidelines do not form part of the specifications set under Regulation 58A of the Regulations and do not have the force of law. In the event of any inconsistency with the specifications set out in clauses 6–8, the specifications prevail.

This circular also imposes restrictions on the discharge of offal or fish while setting and hauling bottom longlines.

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