



Fisheries New Zealand

Tini a Tangaroa

**OPERATIONAL PLAN TO MANAGE THE INCIDENTAL CAPTURE OF
NEW ZEALAND SEA LIONS IN THE SOUTHERN SQUID TRAWL
FISHERY (SQU6T)**

21 November 2019 – 30 September 2023

V 1.0

KEY POINTS

- This Operational Plan is effective from 21 November 2019 until 30 September 2023.
- The annual fishing-related mortality limit is 52.
- The total number of sea lion mortalities (52) is estimated using observed sea lion captures adjusted by a cryptic multiplier of 1.3.¹ There will be an assumption of 2.3 sea lion mortalities per 1,000 tows applied to any unobserved tows (0.0023 per tow).
- Vessel Operators have agreed to use audited Mark 3/13 Sea Lion Exclusion Devices (SLEDs) in all tows (**100%**) when targeting squid in SQU6T. SLEDs will be required by regulation from 1 October 2020.
- A minimum of **90%** of all tows will be observed in the Squid 6T fishery.

PURPOSE OF OPERATIONAL PLAN

This Operational Plan sets out the measures in place in the Squid 6T fishery to manage the interaction between fishing activity and sea lions. All industry operators intending to fish in the Squid 6T fishery between 21 November 2019 and 30 September 2023 must adhere to these measures.

The measures are in place to give effect to the Minister of Fisheries decision² on the management of sea lion interactions with the squid fishery in SQU6T. Under section 15(3) of the Fisheries Act 1996 operators are required to provide information relating to the fishing-related mortality limit. This Operational Plan sets out the information that is required.

FISHING-RELATED MORTALITY LIMIT

The annual fishing-related mortality limit, to be applied on a fishing year basis from 21 November 2019 until 30 September 2023 is 52.

¹ This is based on the weighted average of effort composition (ratio of midwater to bottom trawls) for the three fishing years (2015/16 to 2017/18).

² Announced on 21 November 2019.

ARRANGEMENTS TO MONITOR THE FISHING-RELATED MORTALITY LIMIT

- The annual fishing-related mortality limit of 52 is estimated as a cryptic multiplier of 1.3 on the number of observed captures.
- There will be an assumption of 2.3 sea lion mortalities per 1,000 tows applied to any unobserved tows (0.0023 per tow).
- Mark 3/13 Sea Lion Exclusion Devices (SLEDs) will be used in all tows in SQU6T.
- There will be a minimum of 90% observer coverage across all tows in the Squid 6T fishery.

SEA LION EXCLUSION DEVICES (SLEDs)

The use of SLEDs will be regulated for the 2020/21 Fishing Year.

In the 2019/20 Fishing Year SQU6T quota owners agree to:

- Deploy an approved SLED when fishing for squid in SQU6T. The specification for the Mark 3/13 design is attached (Appendix 1).
- Have all SLEDs audited before the season starts by an authorised trawl net maker.
- Provide audited SLED details to Deepwater Group Ltd.
- Carry a minimum of two audited SLEDs on each vessel fishing in SQU6T.
- In the case of any damage to a SLED, immediately cease use of that SLED and notify Deepwater Group Ltd.
- In the case of any change to, or transfer of a SLED, notify Deepwater Group Ltd. Immediately.

SLEDs are measured and checked by Fisheries New Zealand observers before fishing commences in Squid 6T to confirm SLEDs meet the Mark 3/13 specifications. Note that:

- i. Observers on board will measure SLEDs before deployment in SQU6T to ensure the SLEDs meet the specification for the Mark 3/13 design.
- ii. Approved SLEDs must not be modified during the fishing season.
- iii. If a SLED is repaired onboard when fishing in SQU6T an observer will measure the SLED before it is used again.
- iv. If the repaired SLED no longer meets the approved specification, the SLED will not be deployed in SQU6T.

The SLED must also comply with Regulation 15A of the *Fisheries (Southland and Sub-Antarctic Areas Commercial Fishing) Regulations 1986*. This regulation prescribes a minimum mesh size of 60mm for

any part of the trawl net when fishing within the Sub-Antarctic Fishery Management Area (including in SQU6T).

REPORTING REQUIREMENTS

Reporting to Fisheries New Zealand

Vessel operators must provide the Observer Programme with 72 hours' notice (not including Saturdays, Sundays and public holidays) prior to the vessel leaving port for **each** fishing trip where the vessel intends to operate in SQU6T. Notification can be provided by emailing the notification form in Appendix 2 to the Observer Programme. The notification must contain the following information:

- Name of fishing company.
- Name of fishing vessel.
- Call sign.
- Date and time of notification.
- Name of vessel master.
- Port of departure.
- Expected arrival time in port of departure.
- Expected date and time of departure.
- Number of approved SLEDs.
- Whether the vessel intends to fish in SQU6T.
- Estimated trip duration.

Operators of vessels that move from SQU1T to SQU6T during the same trip are still required to notify the Observer Programme of their intention to start fishing in SQU6T. Vessel operators are required to give the full 72 hours notification before entering SQU6T. Vessel operators may be requested to return to port to allow placement of an observer onboard.

Permit holders must complete a non-fish species or protected fish species catch report in the event of any marine mammal capture. Reports must be completed and provided at the same time as the corresponding fish catch report (completed within 8 hours after fishing ends and provided before the close of the day on which the report must be completed). This notification fulfils the reporting requirements under the Marine Mammals Protection Act 1978.

TRIGGER FOR REVIEW OF THE OPERATIONAL PLAN

This Operational Plan will apply until 30 September 2023. The Operational Plan will be reviewed prior to

30 September 2023 if significant new information becomes available that indicates fisheries activities are having a different impact on the sea lion population than estimated in 2019, or there are changes in fishing operations/level of effort, or there are significant new concerns regarding the sea lion population.

Examples of what might trigger an early review of the Operational Plan include an Auckland Islands sea lion pup count that is less than 1,575 or an unusual mortality/disease event affecting large numbers of sea lions.

OBSERVER COVERAGE

Fisheries New Zealand intends to provide a minimum of 90% observer coverage across all tows in the Squid 6T fishery. Among other things, Observers will monitor that:

- Each vessel accurately records and reports any New Zealand sea lion captures.
- SLEDs are in good working order, have not been modified, and are being deployed in the correct manner.

NO RETENTION OF SEA LIONS

Should any vessel capture a sea lion, Fisheries New Zealand does not require animals to be retained for necropsy purposes. Any captured sea lion should be conspicuously marked for future identification (should the animal be re-captured) and discarded at sea as outlined in the 'Marine Mammal Operational Procedures'.

FISHERY CLOSURE PROCESS

Fisheries New Zealand will work with DWG to monitor performance against the fishing-related mortality limit. Once the fishing-related mortality limit is about to be reached Fisheries New Zealand will advise the Minister who may close the fishery by *gazette notice*.

Closure of the Squid 6T fishery will be undertaken without consultation but Fisheries New Zealand will work with DWG to ensure all participants in the fishery are kept updated on levels of fishing activity against the fishing-related mortality limit throughout the fishing season via weekly reports.

FURTHER INFORMATION

If you would like further information on the management measures in place for the Squid 6T fishery please contact:

Fisheries New Zealand - Tini a Tangaroa
Fisheries Management Deepwater Team
Ministry for Primary Industries - Manatū Ahu Matua
Charles Fergusson Building 34-38 Bowen Street
PO Box 2526 Wellington 6140
0800 00 83 33
Deepwater.team@mpi.govt.nz

Ministry for Primary Industries – Observer Programme
PO Box 2526
Wellington
Email: observer@mpi.govt.nz
Phone: 04 819 4762

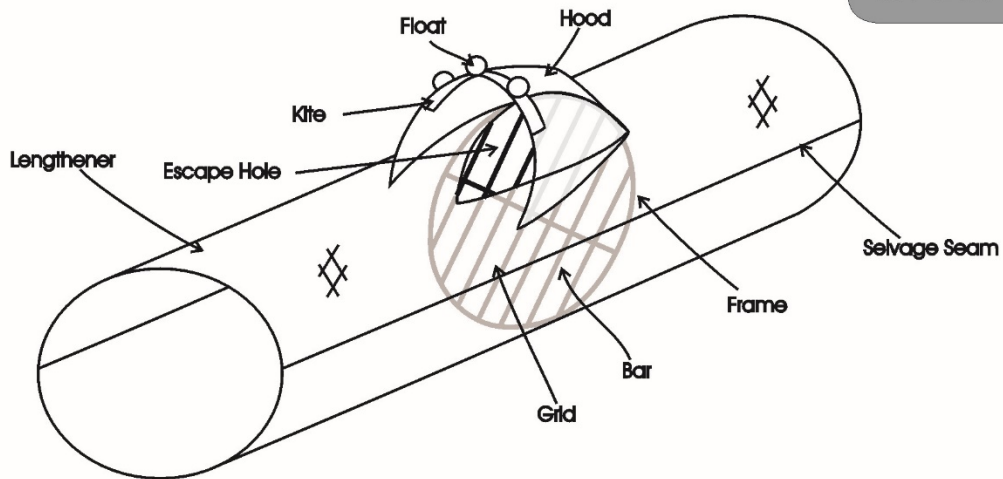
Deepwater Group Ltd
Level 12, 36 Kitchener Street
PO Box 5872
Auckland 1141
Phone: 09 379 0556

October 2010 MK 3/13 SLED approved by SLED Working Group September 2009. Clause 11 modified by MFish November 2010; clause 7 modified by MAF January 2012; clause 6 modified by MPI July 2012.

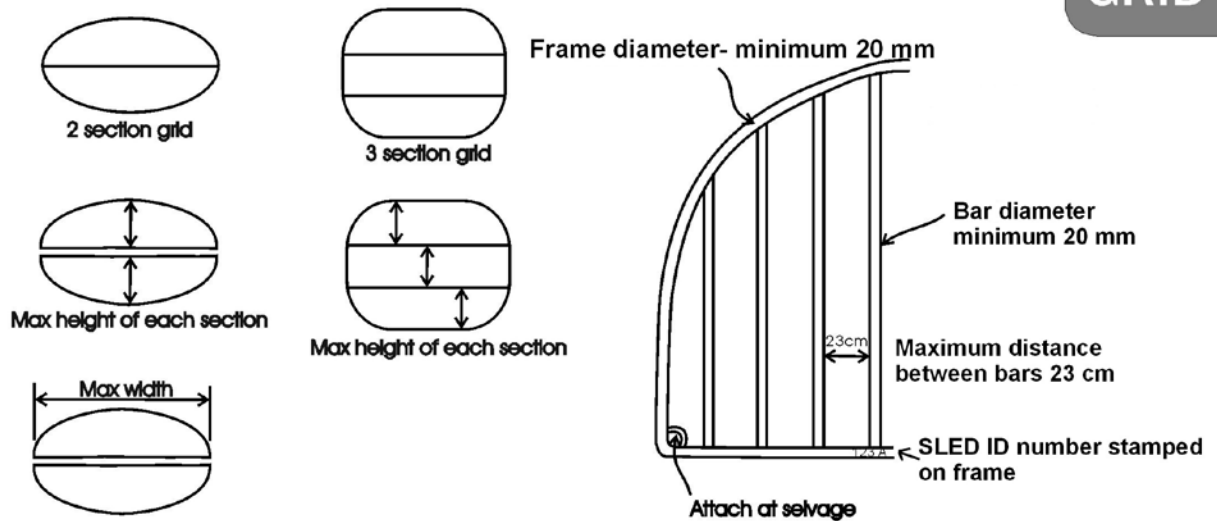
The SLED required for use by all vessels in the SQU6T fishery is an approved type that meets the following criteria:

1. The SLED must consist of a lengthener section of net, with either 2 or 4 seams, containing a 2 or 3 piece grid, hinged horizontally along the middle. The grid must be set in the net at about $45^{\circ} \pm 5^{\circ}$ from the vertical with the top of the grid closest to the cod end section and continuously sewn to the net meshes around its outer edge.
2. The grid must be constructed of minimum 20mm outside diameter solid stainless steel bar and should be shaped to conform to the working parameters of the net (refer diagram).
3. Vertical grid bars must be evenly spaced at a continuous maximum distance of 23cm between bars (see diagram). There will be no minimum number of bars, provided they are evenly spaced and do not exceed the required maximum spacing. It may be necessary to have the last spacing between the final bar and the grid frame differing from the rest of the spacings provided they are less than 23cm apart between bars and frame.
4. The escape hole must be triangular and cut into the upper surface of the lengthener section. This hole must be a minimum of 130cm wide at the base, measured along the top bar of the grid. The apex of the triangle must be a minimum of 150cm forward of the base (refer diagram).
5. Above the escape hole, a hood-shaped mesh scoop must be attached with its open (leading) end facing into the water-flow and its closed (trailing) end attached and over stretched to the top bar of the grid. The leading edge of the hood must be a minimum of 90cm high when fully open. The leading edge rope around the mouth of the hood must be a minimum of 320cm long after attachment of kite and floats. The hood must be a minimum length of 170cm long (refer diagram).
6. The hood must have a semi rigid kite 220cm long by 32cm wide (both measurements + 10%; a piece of thick conveyor-belt is ideal) attached under the meshes of the hood. The kite must be attached to the hood by stitching at regular intervals the leading edge of the hood and the leading edge of the kite using a minimum of eight attachment points. The trailing edge of the kite should also be attached to the hood netting. The leading corners of the hood must extend forward of the escape hole.
7. Three floats of between 19 and 30cm in diameter (a centre hole float is best) must be each attached to the leading edge on the kite. One float must be in the centre of the kite length and the other two equidistant between the centre float each end of the kite (refer diagram).
8. The SLED should be inserted into the trawl (between the body of the trawl and the lengthener) with the escape hole always on the upper surface when the net is fishing.
9. Each SLED grid frame must have a unique registration number, identifying it as a unit, clearly stamped into the frame bar at each end of each hinge section. Deepwater Group Ltd will record each SLED registration number. DWG's register of SLED numbers must be provided to MPI on an annual basis before fishing commences.
10. Depending on the net for which the SLED is built, there are elements of the SLED configuration that may vary, including: the presence or absence of floats attached to the outside of the grid or back of the kite, the shape, width and height of the grid, the number of vertical bars in the grid, the number of meshes in the hood and the number and size of meshes in the lengthener section.
11. No extra panels or mesh material may be fitted inside the net or lengthener before the SLED. Additional floats may be fitted outside the lengthener to the top of the grid frame. Floats may also be fitted inside the lengthener behind the grid or frame but NOT in front of the grid.
12. Alterations are not to be made to the design outside of this specification. For new builds or major repairs contact Motueka Nets Ltd or Hampidjan NZ Ltd.

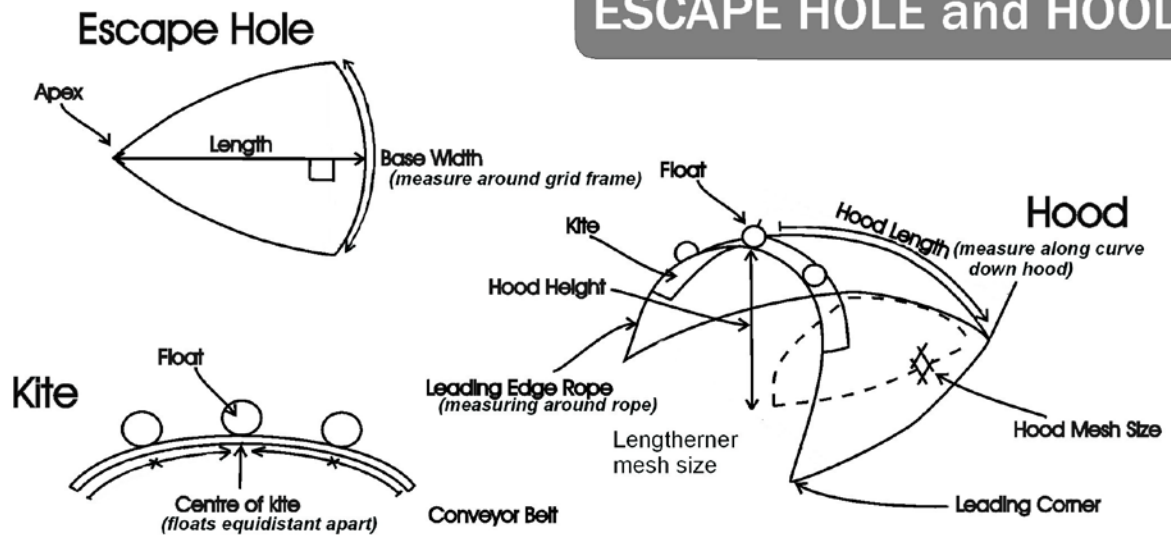
SLED TERMS



GRID



ESCAPE HOLE and HOOD



72-HOUR NOTIFICATION OF PORT CALL OR PORT DEPARTURE FOR ANY VESSEL THAT HAS FISHED/OR INTENDS TO FISH IN SQU6T

Name of Vessel	
Name of Fishing Company	
Call sign	
Date of Notification (day-month)	
Time of notification (hours)	
Name of vessel master	
Name of port of departure	
Arrival time in port of departure	
Number of approved SLED	
Expected departure date	
Expected departure time	
Intend to fish in SQU6T Yes/No	
Estimated duration of trip (days)	

Signature of Vessel Master or Company Representative

Sign:

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Please email this completed form to the Ministry's Observer Programme.

Email: observer@mpi.govt.nz

Completed forms must be received no later than 72 hours (not including Saturdays, Sundays and holidays) prior to the vessel departing from the notified port of departure.