Ministry for Primary Industries
Manatū Ahu Matua

OPERATIONAL PLAN TO MANAGE THE INCIDENTAL CAPTURE OF NEW ZEALAND SEA LIONS IN THE 2016 SOUTHERN BLUE WHITING FISHERY at CAMPBELL ISLAND (SBW6I)

July 2016

PURPOSE

1 This Operational Plan (the Plan) sets out the operational measures that vessels which target southern blue whiting in the Campbell Island fishery (SBW6I) will employ during the 2016 season to manage interactions with New Zealand sea lions (sea lions).

2 This Plan also details the additional monitoring that MPI observers will undertake in support of these operational measures and to inform the future management of sea lion interactions in this fishery.

3 Following an unprecedented number of interactions with sea lions during the 2013 fishing season in SBW6I, additional operational measures were developed that the fleet has adhered to since the 2014 season. Vessel operators have agreed to continue with these measures for the 2016 season. These measures have been effective in reducing captures of sea lions in this fishery.

4 The measures contained in this Plan apply in addition to agreed industry requirements and guidelines specified in both Vessel Management Plans (VMPs) and the Marine Mammal Operational Procedures (MMOP).

5 The measures specified in this document have been developed with the Deepwater Group Ltd (DWG) which is the organisation that represents southern blue whiting quota owners.

6 These operational measures will give effect to the operational objectives in the southern blue whiting fishery specific chapter of the National Deepwater Fisheries Plan, including:

a. **Operational Objective 1.1:** Support the southern blue whiting fishery in achieving and maintaining credible third party certification and ensure any Conditions of Certification are met within the required timeframe

b. **Operational Objective 2.2:** Ensure that incidental New Zealand sea lion mortalities, in the southern blue whiting fishery at the Campbell Islands (SBW6I), do not impact the long term viability of the sea lion population and that captures are minimised through good operational practices.

OPERATIONAL MEASURES

7 The additional operational measures detailed in this Plan were developed following a review of the information collected during the 2013 season, and after implementing the Plan in the 2014 season.

8 Three categories of operational measures will apply in the 2016 SBW6I season:

a. Information gathering by MPI's Observer Programme;
b. Real-time communication between vessels, DWG and MPI; and
c. Additional mitigation measures that aim to minimise risk of sea lion capture and any potential adverse effects on the Campbell Island sea lion population.

Information gathering

9 At least one MPI Observer will be placed on each vessel that operates in SBW6I during the 2016 season.

10 MPI Observers will undertake an additional marine mammal abundance count each day. This second count will take place in addition to the first count (which is taken during the first daylight haul as standard practice) and will be taken during an additional daylight tow. This count aims to detect any variation in the numbers of marine mammals that attend vessels during the course of a fishing event.

11 In addition to standard ID and biological sampling (sex, length, tissue samples, and photos), observers will aim to take a tooth sample from any sea lion mortality observed.

12 Observers will also monitor the operation of approved Sea Lion Exclusion Devices (SLEDs) in the fishery, specifically:

a. Any issues with crew safety; and
b. The behaviour of the SLED in the trawl net.

13 Observers will also closely monitor each vessel's adherence to the guidelines specified in the VMP and MMOP.

Additional mitigation measures

14 SLEDs will be used on every tow in SBW6I during 2016.

15 All SLEDs will be audited on shore before the season commences, to ensure they meet the agreed SLED specifications (attached).

16 Each SLED will be measured by the MPI Observer on board for the first SBW6I trip in 2016 before fishing commences.

17 SLED damage: If at any point during the season the observer or crew have reason to consider a SLED has been damaged, its use will be discontinued until the SLED measurements have been re-checked by the Observer. If the observer is CONFIDENT that the SLED still meets the specifications, its use can be continued. If the observer has ANY DOUBT about whether the SLED meets the specifications, the measurements will be sent as soon as is practical to the MPI Observer Programme for verification by the MPI Deepwater Fisheries Management team. Use of the SLED can resume only after measurements have been verified by MPI.

18 All vessels may be audited to ensure they abide by the guidelines set by their VMP and the MMOP.

19 MPI has also been informed that industry have developed a series of sea lion trigger points, including a limit that if reached will prompt the fleet to leave the fishery for the year. **MPI Observers will closely monitor and report capture trigger points. MPI will monitor progress towards any capture limits in place.**

Communication

20 Each vessel that operates in SBW6I will communicate daily with DWG representatives.

21 Observers will include sea lion abundance counts in the standard weekly reporting regime.

22 Each vessel will have its own digital camera on board to ensure photos of any incidental captures can be emailed to DWG immediately for identification purposes.

MONITORING AND REVIEW OF THIS PLAN

23 This Plan will commence at the onset of the 2016 SBW6I season and will be reviewed at the end of that season. The review will incorporate the information collected by MPI Observers, and the industry. It will aim to determine which aspects of the Plan can be removed, changed, or should continue to be incorporated in the management of sea lion interactions in this fishery.

24 In April 2014, the Minister of Conservation and the Minister for Primary Industries announced the development of a Threat Management Plan (TMP) for New Zealand sea lions. Once the TMP has been finalised and agreed, it will be used to inform the future management of fisheries interactions with sea lions, including measures taken in SBW6I.

DWG AND MPI SLED SPECIFICATION FOR _ _ OPERATIONAL PLAN

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° ± 5° 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 20 mm 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 23 cm 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 130 cm wide at the base, measured along the top bar of the grid. The apex of the triangle must be a minimum of 150 cm 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 90 cm high when fully open. The leading edge rope around the mouth of the hood must be a minimum of 320 cm 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 220 cm long by 32 cm 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 30 cm 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).

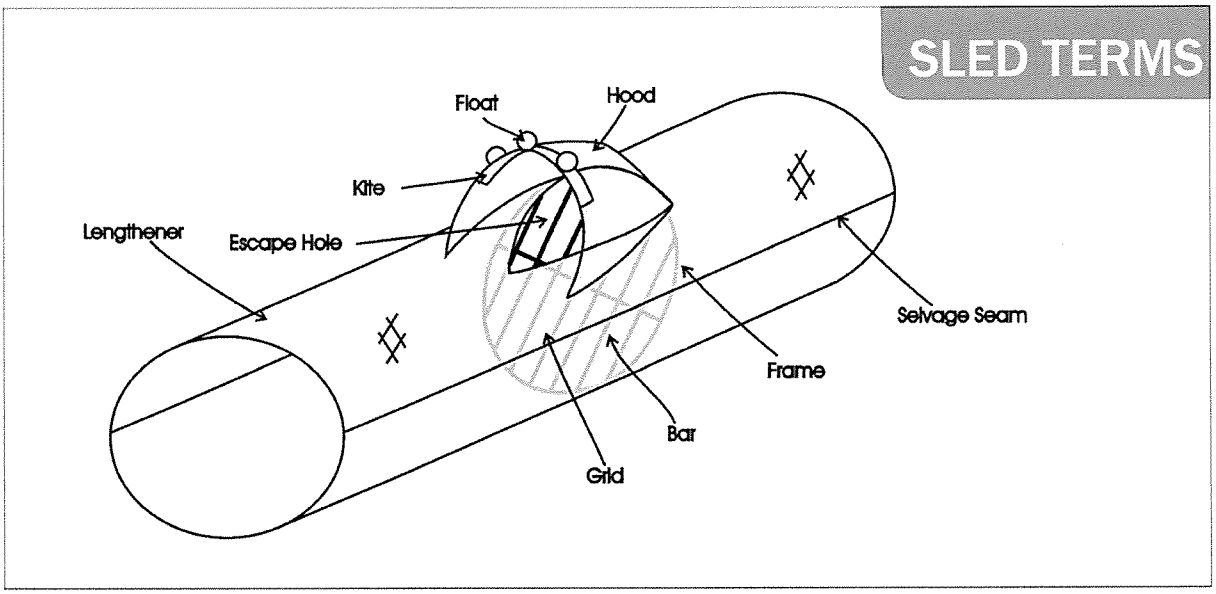
8. The SLED should be inserted into the trawl (between the body of the trawl and the lengthener) with the escape hole always on the upper surface when the net is fishing.

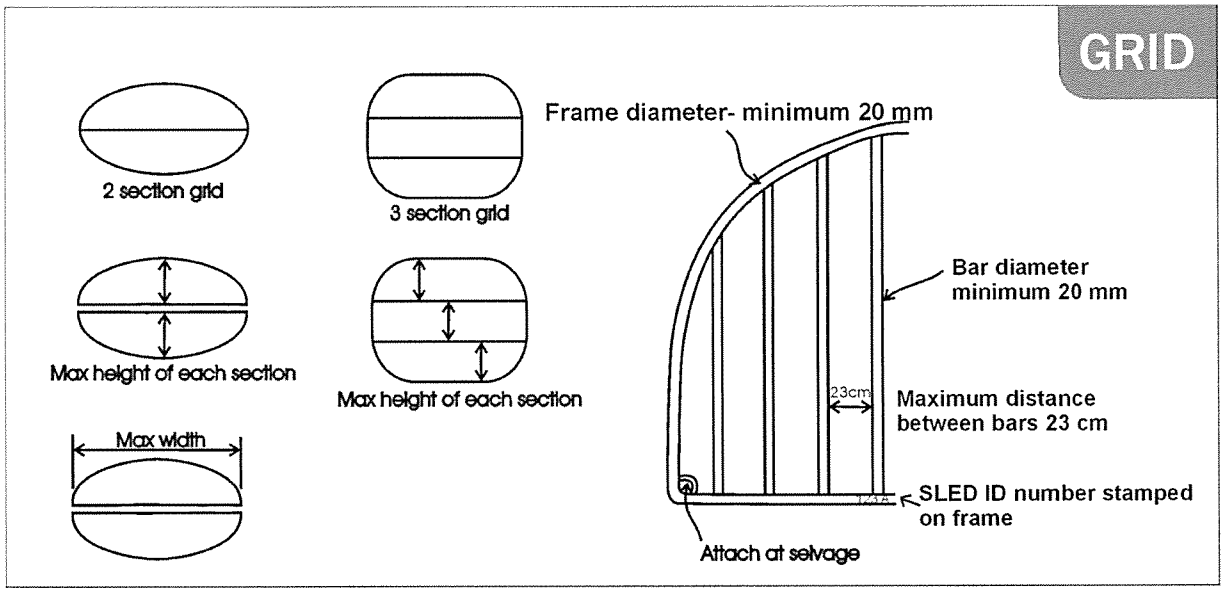
9. Each SLED grid frame must have a unique registration number, identifying it as a unit, clearly stamped into the frame bar at each end of each hinge section. Deepwater Group Ltd will record each SLED registration number. DWG's register of SLED numbers must be provided to MPI on an annual basis before fishing commences.

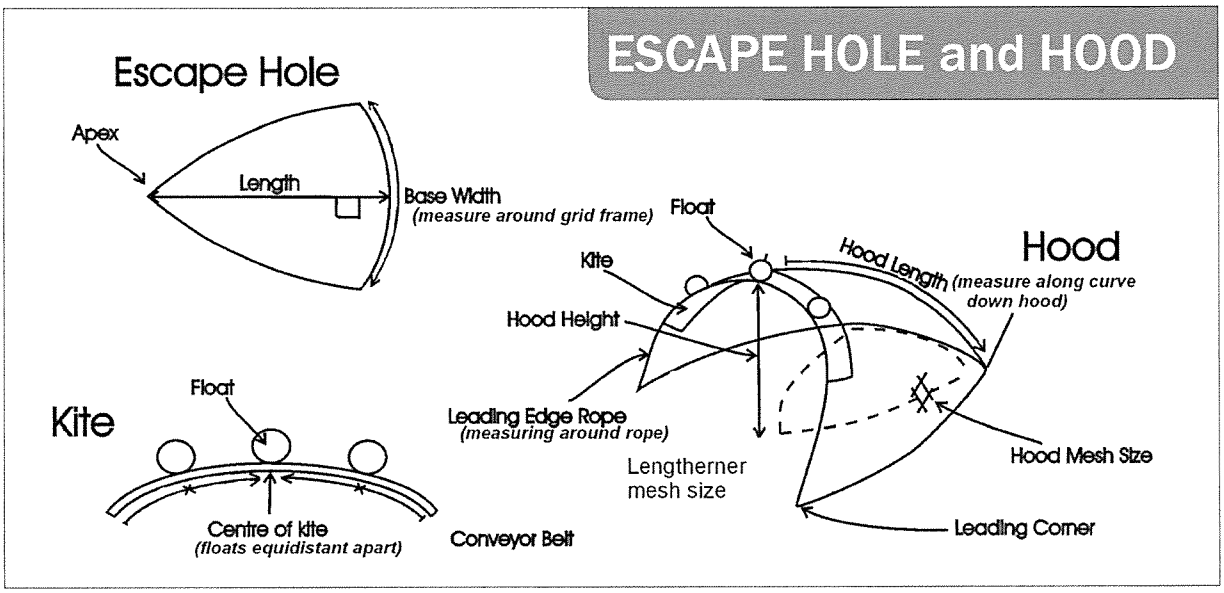
10. Depending on the net for which the SLED is built, there are elements of the SLED configuration that may vary, including: the presence or absence of floats attached to the outside of the grid or back of the kite, the shape, width and height of the grid, the number of vertical bars in the grid, the 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
Float
Hood
Kite
Lengthener
Escape Hole
Selvage Seam
Frame
Bar
Grid


GRID
2 section grid
3 section grid
Frame diameter- minimum 20 mm
Bar diameter
minimum 20 mm
Max height of each section
Max height of each section
23cm
Maximum distance
between bars 23 cm
Max width
SLED ID number stamped
on frame
Attach at selvage


ESCAPE HOLE and HOOD
Escape Hole
Apex
Length
Base Width
(measure around grid frame)
Float
Hood
Kite
Hood Length (measure along curve down hood)
Hood Height
Kite
Float
Leading Edge Rope
(measuring around rope)
Lengtherner
mesh size
Hood Mesh Size
Leading Corner
Centre of kite
(floats equidistant apart)
Conveyor Belt