

**FISHERIES MANAGEMENT ACT 1991
NORTHERN PRAWN FISHERY MANAGEMENT PLAN 1995**

**NPF DIRECTION No. 107
(revoking NPF Direction No. 94)
GEAR REQUIREMENTS**

I, Richard McLoughlin, Managing Director of the Australian Fisheries Management Authority, as delegate, make the following Direction under sections 17(5A) and 17(5B) of the *Fisheries Management Act 1991* and section 25(1) of the *Northern Prawn Fishery Management Plan 1995*.

Dated March 2007

Managing Director,
Australian Fisheries Management Authority

Citation

1. This Direction may be cited as NPF Direction No.107.

Commencement

2. This Direction commences on day of registration.

Application

- 3.1 This Direction applies to a holder of statutory fishing rights in the Northern Prawn Fishery and to a person acting on behalf of the holder.
- 3.2 However, this Direction does not apply to the holder of a scientific permit that authorises the use of an alternative Turtle Excluder Device or By-catch Reduction Device.

Period of Application

4. This Direction applies for a period beginning on the date this Direction commences and ending on 31 March 2010.

Interpretation

- 5.1 In this Direction:

“**boat**” means a boat that is nominated on statutory fishing rights for the Northern Prawn Fishery, and includes carrier boats and fishing boats;

“**Bycatch Reduction Device**” means a device that allows fish and other animals to escape immediately after being taken in the net and is constructed in accordance with Schedule 1;

“**forward edge**” is the edge of a Bycatch Reduction Device where the funnel is attached to the codend;

“**modified Turtle Excluder Device**” means a device described in Schedule 2;

“**net**” means a net used for trawling except a try-net;

“Turtle Excluder Device” means a device fitted to a net, and modification made to a net, that allows turtles to escape immediately after being taken in the net, and which has:

- a) a rigid or semi-rigid inclined barrier grid comprised of bars extending from the foot to the head of the net that is attached to the circumference of the net which must guide turtles towards an escape hole immediately forward of the grid. **The minimum dimensions of this grid to be at least 81cm by 81cm. This structure is to be set at a minimum angle of between 30 and 55 degrees in relation to the horizontal plane of water through the net;** and
- b) an escape opening which must be:
 - a double flap rectangular net opening where the cut immediately forward of the TED must be a minimum of 61 cm and the two forward cuts of the escape opening must not be less than 51 cm long from the points of the cut immediately forward of the TED frame. The resultant length of the leading edge of the escape opening cut must be no less than 142 cm stretched, or a double flap net triangular opening where the cut immediately forward of the TED must be a minimum of 102 cm with minimum forward cuts of 101 cm. The flaps must be composed of two equal size rectangular panels of mesh. Each panel must be a minimum of 147 cm wide and may overlap each other no more than 38 cm. The panels may only be sewn together along the leading edge of the cut. The trailing edge of each panel must not extend more than 61 cm past the posterior edge of the TED frame. Each panel may be sewn down the entire length of the outside edge of each panel, or;
 - a single flap rectangular net opening where the cut immediately forward of the TED must be a minimum of 61 cm and the two forward cuts of the escape opening must not be less than 66 cm long from the points of the cut immediately forward of the TED frame. The resultant length of the leading edge of the escape opening cut must be no less than 181 cm stretched, or a single flap triangular net opening where the cut immediately forward of the TED must be a minimum of 102 cm with minimum forward cuts of 136 cm. The flap must be a minimum of 338cm by 132 cm piece of mesh. The 132 cm edge of the flap is attached to the forward edge of the opening 180 cm edge. The flap may extend no more than 61 cm behind the posterior edge of the TED frame.
- c) a maximum bar spacing of 120mm.
- d) Floats must be attached to the top one-half of all TEDs with bottom escape openings. The floats may be attached either outside or inside the net, but not to a flap. Floats of any size and in any combination must be attached such that the combined buoyancy of the floats, as marked on the floats, equals or exceeds the weight of the TED.
- e) it is not permitted to attach any weights, meshing or other materials which may inhibit the opening of this escape flap.

5.2 For the purposes of this Direction, all net measurements refer to the measurement extending from the centre of opposing knots, when the mesh is pulled taut.

5.3 A term used in this Direction that is defined for the purposes of the Northern Prawn Fishery Management Plan 1995 has the same meaning in this Direction as it has in that plan.

[Notes:1. Terms defined in the *Fisheries Management Act 1991* have the same meanings in this determination. 2. Terms defined in the Northern Prawn Fishery Management Plan 1995 include "Northern Prawn Fishery" and "Northern Prawn Fishery area".]

Nets to which devices must be fitted

- 6.1** The fishery is closed to a boat using a net unless each net used by that boat has:
- (a) both a Turtle Excluder Device and a By-catch Reduction Device (as described in Schedule 1) installed in each net that is rigged for fishing; or
 - (b) a modified Turtle Excluder Device (as described in Schedule 2) installed in each net that is rigged for fishing; and
 - (c) the codend cover (skirt) attached no further than 60 meshes from the codend drawstrings.
- 6.2** A net is rigged for fishing if part or all of the net is in the water, or if it is shackled, tied or otherwise connected to any trawl door or trawl board, or to any tow rope or cable, either on board the boat or attached in any manner to the boat.

Revocation of NPF Direction No. 94

- 7.** This Direction revokes NPF Direction No. 94 with effect from the day of commencement.

SCHEDULE 1

Each of the following are bycatch reduction devices:

1. **“Square Mesh Codend”** means a codend with at least half the circumference of the codend, and that has the following characteristics:

- (i) a nominal mesh size no less than 45mm; and
- (ii) netting orientated so that the Direction of twine is longitudinal and transverse to the length of the codend; and
- (iii) an overall length no less than 75 meshes (3.375 metres); and
- (iv) no pieces of netting or other material covering any escape openings of the square mesh, nor any opening closed by any other means, during fishing operations.

2. **“Square Mesh panel”** means a continuous panel of netting that has the following characteristics:

- (i) a nominal mesh size no less than 101mm; and
- (ii) an overall dimension no less than 400mm wide and 600mm long; and
- (iii) the aft edge of the panel is located no further forward from the codend drawstrings than the number of meshes for a codend mesh size described in Schedule 3; and
- (iv) no pieces of netting or other material covering any escape openings of the square mesh, nor any opening closed by any other means, during fishing operations.

3. **“Fisheye”** means a device that has the following characteristics:

- (i) a vertical escape opening held open by a rigid frame; and
- (ii) an escape opening measuring no less than 350mm wide x 150mm high; and
- (iii) an escape opening located no further forward from the codend drawstrings than the number of meshes for a codend mesh size described in Schedule 3; and
- (iv) no pieces of netting or other material covering any escape openings, nor any opening closed by any other means, during fishing operations.

4. **“Yarrow Fisheye”** means a device that has the following characteristics:

- (i) a vertical escape opening held open by a rigid frame; and
- (ii) an escape opening measuring no less than 350mm wide x 150mm with the width of the escape opening divided in half by a solid bar; and
- (iii) an additional rigid bar running from the apex of the frame to the top of the escape opening; and
- (iv) an escape opening located no further forward from the codend drawstrings than the number of meshes for a codend mesh size described in Schedule 3; and
- (v) no pieces of netting or other material covering any escape openings, nor any opening closed by any other means, during fishing operations.

5. **“Radial Escape Section” (RES)** means a device that has the following characteristics:

- (i) a funnel of netting or other material located within the codend; and
- (ii) the circumference of the leading edge of the funnel must be of equivalent length to and attached to the circumference of the codend, where the circumference of the

codend is equivalent to the product of the mesh size and the number of meshes around the codend; and

- (iii) the leading edge of the funnel must be attached to the codend no less than 10 meshes from the leading edge of the escape openings; and
- (iv) the circumference of the trailing edge of the funnel is less than or equal to 0.6 times the number of meshes in the circumference of the codend; and
- (v) individual escape openings no less than a square mesh size of 100mm; and
- (vi) overall escape openings no less than a panel of netting measuring 350mm long and extending radially around the codend for at least half the circumference of the codend; and
- (vii) the trailing edge of the funnel extending no more than 500mm past the aft edge of the escape openings, and
- (viii) an escape opening located no further forward from the codend drawstrings than the number of meshes for a codend mesh size described in Schedule 3; and
- (ix) the forward edge of the RES located no further forward than 900mm of the Turtle Excluder Device grid, or if located further forward than 900mm of the Turtle Excluder Device grid a wire hoop must be attached to the forward edge¹ of the RES; and
- (x) a rigid or semi-rigid wire hoop with a minimum diameter of 650mm located no more than 5 meshes behind the escape openings; and
- (xi) no pieces of netting or other material covering any escape openings, nor any opening closed by any other means, during fishing operations.

6. "Popeye Fishbox" means a device that has the following characteristics:

- (i) a vertical escape opening held open by a rigid frame; and
- (ii) an escape opening measuring no less than 375 mm wide x 375 mm; and
- (iii) a rigid foil positioned at the forward edge of the BRD no less than 200 mm in depth; and
- (iv) an escape opening located no further forward from the codend drawstrings than the number of meshes for a codend mesh size described in Schedule 3; and
- (v) no pieces of netting or other material covering any escape openings, nor any opening closed by any other means, during fishing operations.

SCHEDULE 2

“Modified Turtle Excluder Device” means a device that:

- (i) is a Turtle Excluder Device with the escape opening in the top of the codend; and
- (ii) a bar spacing no more than 60mm; and
- (iii) may have an escape flap over the escape opening (but no part of the escape flap may be closer than 150mm to any part of the grid, when the Turtle Excluder Device is fitted to a codend hung vertically); and
- (iv) may have a guiding funnel or flap inside the codend ahead of the grid (but no part of the guiding funnel or flap may be closer than 150mm to any part of the grid, when the TED is fitted to a codend hung vertically)

SCHEDULE 3

The following table details the maximum number of meshes for placement of BRDs from the codend drawstrings for different codend mesh sizes. The formula to calculate the maximum number of meshes using linear or metric mesh sizes is as follows:

(1) for imperial mesh sizes: $(2 / \text{actual mesh size in inches}) \times 120$

(2) for metric mesh sizes: $(50.8 / \text{actual mesh size in mm}) \times 120$

Mesh Size (mm)	Mesh Size (inches)	Maximum number of meshes required
31.25	1.25	195
32	1.28	191
35	1.4	174
40	1.6	152
43.75	1, 3/4	139
46	1.84	133
46.875	1, 7/8	130
48	1.92	127
50	2	122
53	2.12	115
56.25	2, 1/4	108
58	2.32	105
62.5	2, 1/2	98