D1 Pelagic Trawl Gear Definition

Caleb Taylor (NMFS SF), Alex Perry (NOAA OLE) Alicia M. Miller (NMFS SF), Sam Cunningham (NPFMC)









Introduction (Section 1)

In June 2023, the Council passed a motion for NMFS to work with industry and OLE to:

- clarify that the codend is not intended to be regulated
- allow for gear innovation
- resolve any inconsistencies in current regulations and/or outdated regulations





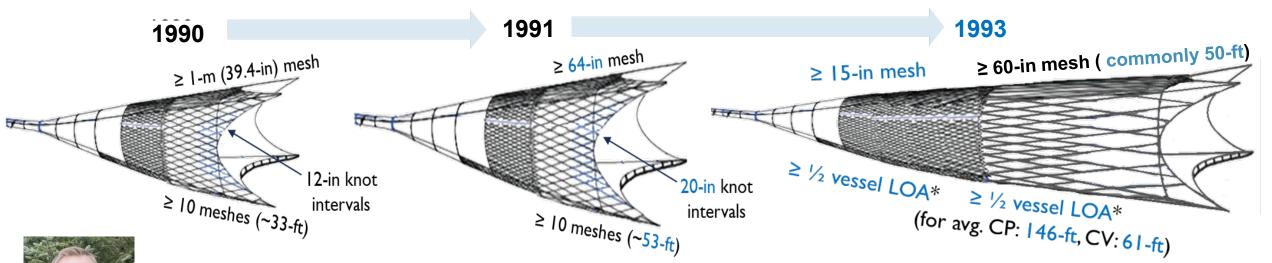
General Background: Pelagic Trawl Gear brief history (Section 2.1)

1993 objective to: "reduce halibut and trawl bycatches by discouraging or preventing trawl operations on the sea bed when halibut and crab PSC allowances have been reached."

1990 emergency interim rule modified the definition to promote escapement of halibut and crabs

Mesh size increased to provide escape panels for halibut and crab in case the trawl contacts or comes near the seabed

Refined in 1993 to ensure that pelagic trawls would be fished as intended and introduced the performance standard.



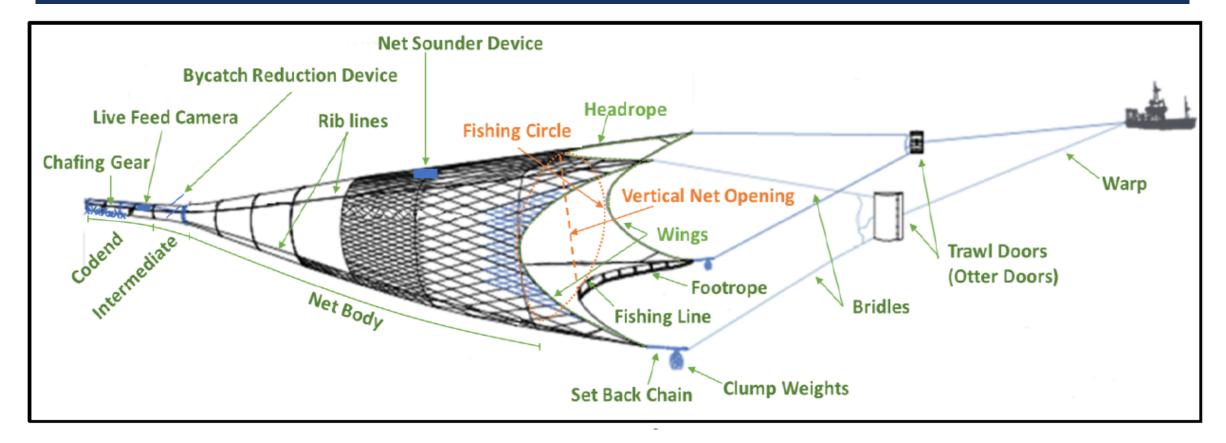


Background: Pelagic Trawl Gear Definition (Section 2, Table 3-1)

- Has no discs, bobbins, or rollers;
- Has no chafe protection gear attached to the footrope or fishing line;
- Except for the small mesh allowed under paragraph (14)(ix) of this definition:
 - (A) Has no mesh tied to the fishing line, headrope, and breast lines with less than 20 inches (50.8 cm) between knots and has no stretched mesh size of less than 60 inches (152.4 cm) aft from all points on the fishing line, headrope, and breast lines and extending passed the fishing circle for a distance equal to or greater than one half the vessel's LOA; or
 - (B) Has no parallel lines spaced closer than 64 inches (162.6 cm) from all points on the fishing line, headrope, and breast lines and extending aft to a section of mesh, with no stretched mesh size of less than 60 inches (152.4 cm) extending aft for a distance equal to or greater than one-half the vessel's LOA;
- Has no stretched mesh size less than 15 inches (38.1 cm) aft of the mesh described in paragraph (14)(iii) of this definition for a distance equal to or greater than one-half the vessel's LOA;
- Contains no configuration intended to reduce the stretched mesh sizes described in paragraphs (14)(iii) and (iv) of this
 definition;
- Has no flotation other than floats capable of providing up to 200 lb (90.7 kg) of buoyancy to accommodate the use of a netsounder device;
- Has no more than one fishing line and one footrope for a total of no more than two weighted lines on the bottom of the trawl
 between the wing tip and the fishing circle;
- Has no metallic component except for connectors (e.g., hammerlocks or swivels) or a net-sounder device aft of the fishing circle and forward of any mesh greater than 5.5 inches (14.0 cm) stretched measure;
- May have small mesh within 32 ft (9.8 m) of the center of the headrope as needed for attaching instrumentation (e.g., net-sounder device); and
- May have weights on the wing tips.



Background: Pelagic Trawl Gear Components (Section 2.2, Fig. 2-1)







Background: Pelagic Trawl Gear Configurations (Section 2.2)

Net design, shape, and length can vary depending on many factors:

- Vessel size, horsepower, and species/area fished
- Forward mesh sizes have become larger over time:
 - ~43ft in 2001 to as large as ~210 ft in 2012
 - vertical net opening can range from 60 ft to 180 ft
- Often contains floats within codends and salmon excluder devices





Description of the Issues: Codend (Section 3.1)

While codend is not included within the pelagic trawl gear definition in § 679.2, the codend is defined in § 600.10 as the terminal, closed end of a trawl net.

- Both sections when put together do not convey what was intended
 Flotation in the codend would need to be specifically allowed within the pelagic trawl gear definition or the codend could be explicitly excluded from the definition of trawl gear within § 679.



Credit: Brent Paine/United Catcher Boats



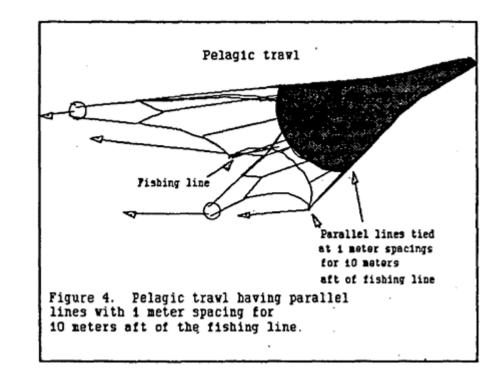




Description of the Issues: Outdated Regulations (Section 3.3)

(iii)(B) Has no parallel lines spaced closer than 64 inches (162.6 cm) from all points on the fishing line, headrope, and breast lines and extending aft to a section of mesh, with no stretched mesh size of less than 60 inches (152.4 cm) extending aft for a distance equal to or greater than one-half the vessel's LOA;

 Based on recent inspections and discussions with industry, Rope Trawls (parallel line trawls) have been phased out of the fishery, and thus this paragraph is outdated and could be considered for removal.







Description of the Issues: Innovations (Section 3.4)

In discussions between industry participants and NMFS, some subparagraphs of the definition were identified as potentially limiting gear innovations:

- (14)(i) Has no discs, bobbins, or rollers;
- (14)(vi) Has no flotation other than floats capable of providing up to 200 lb (90.7 kg) of buoyancy to accommodate the use of a net-sounder device; and
- (14)(viii) Has no metallic component except for connectors (e.g., hammerlocks or swivels) or a net-sounder device aft of the fishing circle and forward of any mesh greater than 5.5 inches (14.0 cm) stretched measure.





Enforcement Concerns (Section 4)

Effective enforcement relies on clear, supported, plain-language regulations and gear definitions:

- In performing gear inspections, OLE finds that the *existing* regulatory definitions of pelagic trawl (and nonpelagic trawl) are enforceable;
- Enforcement benefits from clear FMP management objectives and tools for measuring effectiveness;
- Enforcement Precepts (2015): preference for ability to enforce gear restrictions at-sea in real time;
- Simple closures based on gear type (restrictions) promote ease of enforcement both real time and delayed









Enforcement Concerns (Section 4, Table 4-1)

Detection of the existing pelagic trawl (& nonpelagic trawl) gear features by enforcement:

Feature	Common Use	Sea	Air	EM
Discs, bobbins, or rollers	Protection from bottom contact; Bycatch reduction; Aggregation of bottom fish (sweeps)	Х	X**	Х
Chafe protection gear attached to the footrope or fishing line	Protection from bottom contact	х	X**	Х
Mesh tied to the fishing line, headrope, and breast lines with less than 20" between knots *Requires measurements	Bycatch reduction; Hydrodynamics	х		
Stretched mesh sizes *Requires measurements with gauge	Bycatch reduction; Hydrodynamics	Х		
Parallel lines spaced closer than 64" from all points on the fishing line, headrope, and breast lines *Requires measurements	Aggregation of bottom fish (includes tickler chains), sink trawl to depth	х		
Configuration intended to reduce required stretched mesh sizes	Non-compliance with mesh size requirements	Х	X***	X***
Flotation other than floats capable of providing up to 200 lb of buoyancy to accommodate the use of a net-sounder device;	Maintain net shape/opening at slow speeds	х	х	х
Weighted lines on the bottom of the trawl between the wing tip and fishing circle	Aggregation of bottom fish (includes tickler chains); Maintain net shape/opening; Sink trawl to depth	Х	X**	Х
Metallic components aft of fishing circle and forward of 5.5" mesh *Requires measurements	Maintain net shape/opening at slow speeds; Sink trawl to depth	Х		
**Observable by aircraft primarily when setting/bayling goar				





^{**}Observable by aircraft primarily when setting/hauling gear.

^{***}Observable only if such configurations have been previously documented, otherwise would require measurement

Enforcement Concerns (Section 4)

A number of closures in the North Pacific prohibit fishing with trawl gear other than directed fishing for pollock with pelagic trawl. Examples below:

- § 679.24(b)(4) **BSAI pollock nonpelagic trawl prohibition.** No person may use nonpelagic trawl gear to engage in *directed fishing for pollock* in the BSAI.
- § 679.22(b)(3). *Marmot Bay Tanner Crab Protection Area.* No federally permitted vessel may fish with trawl gear in the Marmot Bay Tanner Crab Protection Area, as described in Figure 5 to this part, except federally permitted vessels directed fishing for pollock using pelagic trawl gear.
- Enforcement of these requires *both* an inspection to determine which gear type is being used, *and* also an assessment of the catch retained aboard the vessel to determine what species the vessel is directed fishing for (calculation of maximum retainable amounts (MRAs)).





Use throughout the Regulations: Downstream Impacts (Section 5)

The term "pelagic trawl gear" and related terms such as "nonpelagic trawl gear," are used throughout Part 679.

- Other definitions at 679.2
- Recordkeeping and reporting at 679.5
- Prohibitions at 679.7
- Prohibited Species Bycatch Management at 679.21
- Closures at 679.22
- Gear limitations at 679.24

Regulations at § 679.22(a) and (b) prohibit specific types of trawl gear from operating in specific areas in the Bering Sea, Aleutian Islands and Gulf of Alaska using the following phrases:

- trawl gear other than pelagic trawl gear
- directed fishing for pollock and other species
- bottom contact gear
- mobile bottom contact gear





Subsequent Analysis

The scope of analysis necessary to evaluate the downstream impacts of potential changes will vary greatly depending on the scope of proposed changes.

Considerations include:

- Enforceability of distinctions between pelagic and non-pelagic trawl gear and the current gear/area closures
- Objectives of management measures that use the definition
- Impacts of potential operational changes (monitoring, recordkeeping and reporting, inseason management)





Summary (Section 6, pg. 21)

A basic revision of the trawl gear and pelagic trawl gear definition at § 679.2 would create consistency in the regulations and allow for fishing operations to continue as the Council intended.

Revisions within the pelagic trawl gear definition at § 679.2 could allow for pelagic trawl gear innovations.

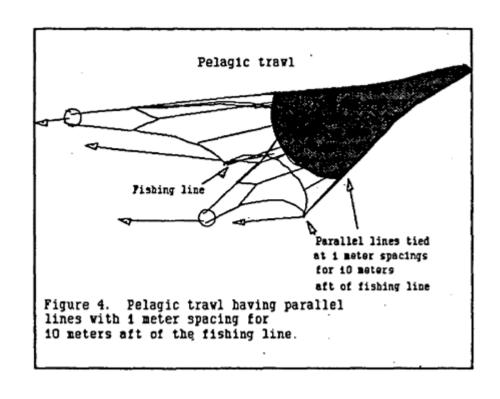
- Impacts to downstream regulations must be considered.
- Intended management objectives of the pelagic trawl gear definition should be clearly stated.
- Impacts to vessel compliance and enforceability should also be considered.





NMFS Recommendation: Outdated regulations (Section 6)

1) Remove paragraph (iii)(B) of the pelagic trawl definition regarding parallel lines in rope trawls.







NMFS Recommendation: Exempting the codend (Section 6)

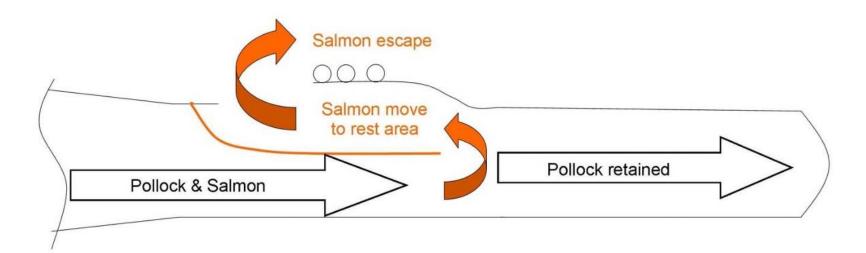
- 2) Revise the definition of Trawl gear in § 679.2 to explicitly exclude the definitions of pelagic trawl gear or nonpelagic trawl gear from limiting the codend design
 - § 679.2(18): Trawl gear means a cone or funnel-shaped net that is towed through the water by one or more vessels. For purposes of this part, this definition includes, but is not limited to, beam trawls (trawl with a fixed net opening utilizing a wood or metal beam), otter trawls (trawl with a net opening controlled by devices commonly called otter doors), and pair trawls (trawl dragged between two vessels) and is further described as pelagic or nonpelagic trawl.

 Definition of trawl gear within part 679 does not apply to the codend.



NMFS Recommendation: Exempting the codend (Section 6)

- 3) Revise paragraph (14)(vi) of the definition of pelagic trawl gear to clearly allow the use of flotation within the codend and excluder devices.
- § 679.2(14)(vi): Has no flotation other than floats capable of providing up to 200 lb (90.7 kg) of buoyancy to accommodate the use of a net-sounder device







Draft Revision (Pelagic Trawl Gear Definition)

- Has no discs, bobbins, or rollers;
- Has no chafe protection gear attached to the footrope or fishing line;
- Except for the small mesh allowed under paragraph (14)(ix) of this definition:
 - (A) Has no mesh tied to the fishing line, headrope, and breast lines with less than 20 inches (50.8 cm) between knots and has no stretched mesh size of less than 60 inches (152.4 cm) aft from all points on the fishing line, headrope, and breast lines and extending passed the fishing circle for a distance equal to or greater than one half the vessel's LOA; or
 - (B) Has no parallel lines spaced closer than 64 inches (162.6 cm) from all points on the fishing line, headrope, and breast lines and extending aft to a section of mesh, with no stretched mesh size of less than 60 inches (152.4 cm) extending aft for a distance equal to or greater than one-half the vessel's LOA;
- Has no stretched mesh size less than 15 inches (38.1 cm) aft of the mesh described in paragraph (14)(iii) of this definition for a distance equal to or greater than one-half the vessel's LOA;
- Contains no configuration intended to reduce the stretched mesh sizes described in paragraphs (14)(iii) and (iv) of this definition;
- Has no flotation other than <u>within bycatch reduction devices</u>, <u>and</u> floats capable of providing up to 200 lb (90.7 kg) of buoyancy to accommodate the use of a net-sounder device;
- Has no more than one fishing line and one footrope for a total of no more than two weighted lines on the bottom of the trawl between the wing tip and the fishing circle;
- Has no metallic component except for connectors (e.g., hammerlocks or swivels) or a net-sounder device aft of the fishing circle and forward of any mesh greater than 5.5 inches (14.0 cm) stretched measure;
- May have small mesh within 32 ft (9.8 m) of the center of the headrope as needed for attaching instrumentation (e.g., net-sounder device); and
- May have weights on the wing tips.



NMFS Recommendation: Innovations (Section 6)

4) Clarify management objectives in pursuing regulatory changes that support trawl gear innovation.

Noted potential drivers for gear innovation:

- Improving fishing efficiency (e.g. directed fishing selectivity, towing and fuel efficiency)
- Minimizing bycatch (e.g. halibut and salmon excluders; species selectivity)
- Limiting fishing impacts in specific areas (e.g. habitat protection areas, and gear closure areas)





Contact Information:

Caleb Taylor NMFS AKRO SF:

caleb.taylor@noaa.gov

Alicia M Miller NMFS AKRO SF:

alicia.m.miller@noaa.gov

Alex Perry NOAA OLE:

alex.perry@noaa.gov

Sam Cunningham NPFMC:

sam.cunningham@noaa.gov

