

## FIXED GEAR MARKING AND ENTANGLEMENT RISK REDUCTION MEASURES ALTERNATIVES SUMMARY

This document provides a synopsis of the alternatives for fixed gear marking and entanglement risk reduction measures and a list of the options for each. Also included is a brief purpose of the alternatives, diagrams of groundfish pot and longline gear configurations, and questions to be answered to fully specify a final preferred alternative.

### Gear Marking

The gear marking provisions are designed to improve the National Marine Fisheries Service's (NMFS) ability to identify the origins of gear involved in an entanglement- including both positive and negative attributions. As discussed in Attachment 2, these provisions would have no immediate direct impact on entanglement risks. In the long run, however, they may help efforts to protect large whales and other protected species by enabling the Pacific Fishery Management Council (Council) and NMFS to design management measures for a specific gear type and/or fishery involved in documented entanglements.

The gear marking action alternatives are gear specific; that is, they would allow pot gear and longline gear in Council-managed groundfish fisheries to be distinguished from each other, and from other fisheries. The distinction between the gear types would be unique combination of colors for each gear type. In June 2024, the Council should specify the gear-specific color(s) and/or shapes (for buoy tags) that will be used to mark each gear type.

<b>Buoy Marking</b>	
No Action: No marks required	
Alternative 1: Gear Specific mark	
Suboption a: patch, shape, letter on buoy	
Suboption b: cattle-ear tag on each buoy, with vessel identification information <b>(PPA)</b>	
<b>Line Marking</b>	
No action: No line marking required	
Alternative 1: Gear specific marking	
A. Portion of line marked	
1. Vertical line only <b>(PPA)</b>	
2. Vertical and Surface line	
B. Distance (length) of mark (of vertical line)	
1. At least top 5 fm	
2. At least top 20 fm <b>(PPA)</b>	
C. Method of marking	
1. Manufactured line <b>(PPA)</b>	
2. Temporary marking (of vertical line)	
a. At least every 2 fm	
b. At least every 5 fm	
c. At least every 10 fm	
D. Transition period from temporary to manufactured line	
1. No transition, manufactured line required upon implementation <b>(PPA)</b>	
2. 5-yr transition	
3. 10-yr transition	
4. Temporary markings and manufactured line allowed indefinitely	

*Outstanding Issues to be Addressed Prior to Final Action*

1. If buoy marking Alternative 1, suboption 2 (PPA), is selected as the FPA- what color/shape of buoy tags would be applied for each groundfish gear?
2. If line marking Alternative 1 (PPA) is selected as the FPA- what multi-color scheme would be applied for each groundfish gear?

## Entanglement Risk Reduction

There is no interdependence among the entanglement risk reduction alternatives or with the gear marking alternatives. In other words, the Council could select one, both, or none of the alternatives for entanglement risk reduction. These items are aimed at minimizing the amount of line in the water, decreasing the likelihood of entanglement by whales or other protected species. Alternative 1 for Surface Gear Requirements would not add any new requirements but would modify regulations to allow fishermen to voluntarily use surface gear at only one end of a pot or longline groundline, rather than both ends as is currently required.

<b>Surface Gear Requirements</b>	
No Action: Surface gear required at both ends of gear	
Alternative 1: Surface gear required at only one end <b>(PPA)</b>	
<b>Surface Line Length Restriction</b>	
No Action: No maximum surface line length	
Alternative 1: Limit amount of surface line length to	
a. 5 fm	
b. 10 fm <b>(PPA)</b>	

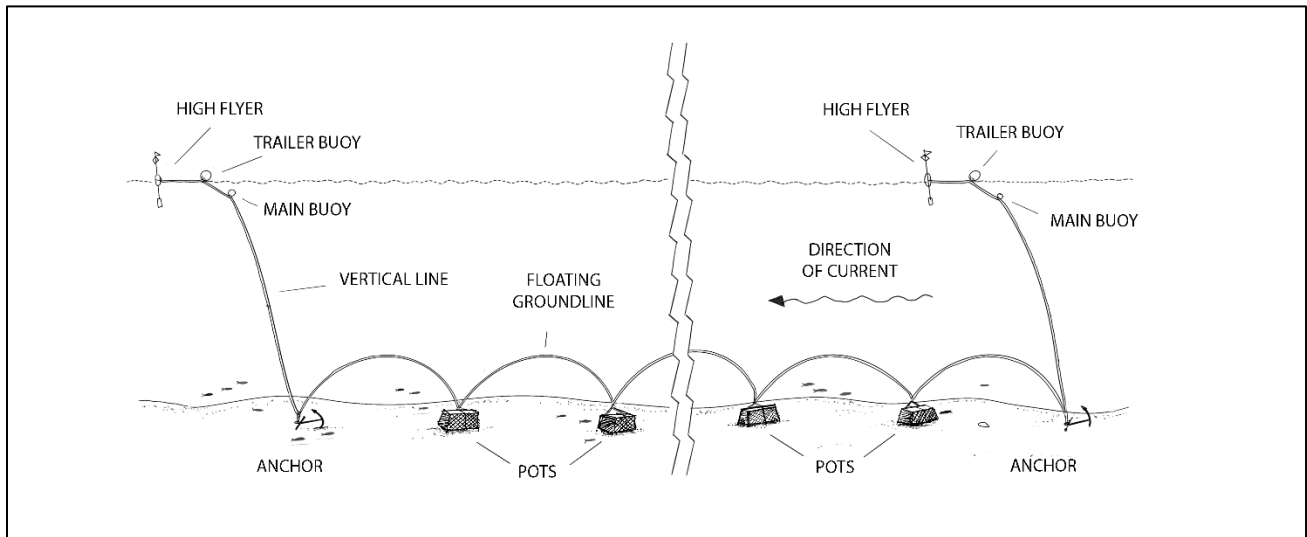


Figure 1. Diagram of groundfish pot gear. Credit: Tom Crestodina/Oregon Sea Grant

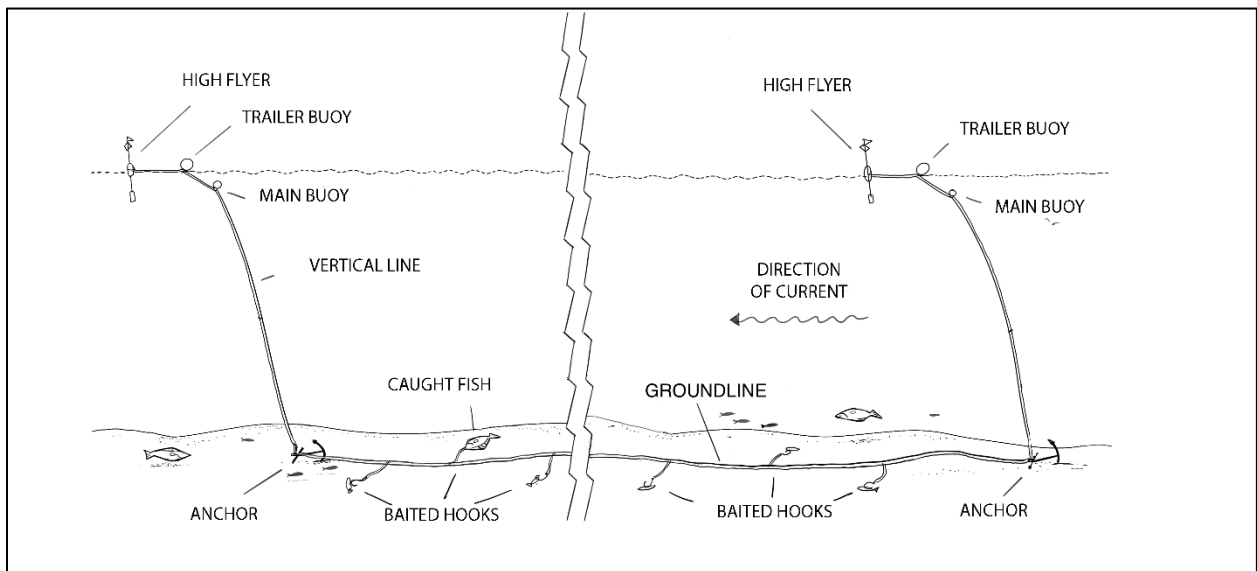


Figure 2. Diagram of groundfish longline gear. Credit: Tom Crestodina/Oregon Sea Grant

## Administrative/Other Items

The escape panel requirements are an administrative clarification. The best practices guide, while not an official alternative, is discussed in Attachment 2 and could be a recommendation by the Council to NMFS to develop.

<b>Escape Panel Requirements</b>	
No Action: No change to escape panel regulations	
Alternative 1: Add clarification for escape panel regulations to prohibit panel placement on bottom of pot, with exception for slinky pots ( <b>PPA</b> ) Suboption a: Change thread count of biodegradable escape panel from No. 21 or smaller to No. 30 or smaller	