

NATIONAL MARINE FISHERIES SERVICE REPORT ON GROUND FISH FIXED GEAR
MARKING AND ENTANGLEMENT RISK REDUCTION

The National Marine Fisheries Service (NMFS) recommends that the Council revise the range of alternatives for temporary line marking as described below, and consider including the new options in a preliminary preferred alternative. These recommendations are intended to aid in refining the temporary line marking alternatives to better meet the Council's purpose and need for this action. This report is not relevant to alternatives for manufactured colored lines.

Length of temporary line marks (Line Marking - C2)

Entanglements may be observed at a distance and/or in challenging conditions, and a mark larger than the 12 inches proposed in F.6 Attachment 2 would increase the likelihood that the mark will be seen clearly enough to identify the gear. Therefore, in C2, **NMFS recommends (1) that the Council replace “a gear-specific color mark of at least 12 inches” with “a continuous gear-specific color mark at least 24 inches long” (Figure 1).**

Maximum distance between temporary line marks (Line Marking - C2 Sub-options)

Figure 3-1 in Agenda Item F.6 Attachment 2 shows that when any line was visible in an entanglement, it was usually less than 6-20 feet (1-3.3 fathoms). Based on this information, a smaller interval of unmarked line between marks would increase the likelihood that marks are visible in an entanglement. Therefore, **NMFS recommends (2) adding a new option of no more than 2 fathoms (12 feet) between temporary marks (Figure 1).**

In addition, **NMFS recommends (3) removing the 20 fathom and 50 fathom suboptions for the maximum distance between temporary marks (C2c and C2d; See Figure 1).** When the size and spacing of temporary marks are considered together with the total distance over which marks are required on the vertical line (5, 20, or 50 fm from the main surface buoy), allowing 20 or 50 fathoms between marks could mean that very few marks would be required. Temporary mark spacing that leaves over 98% of the line unmarked would not appreciably increase the likelihood that entangled line can be identified.

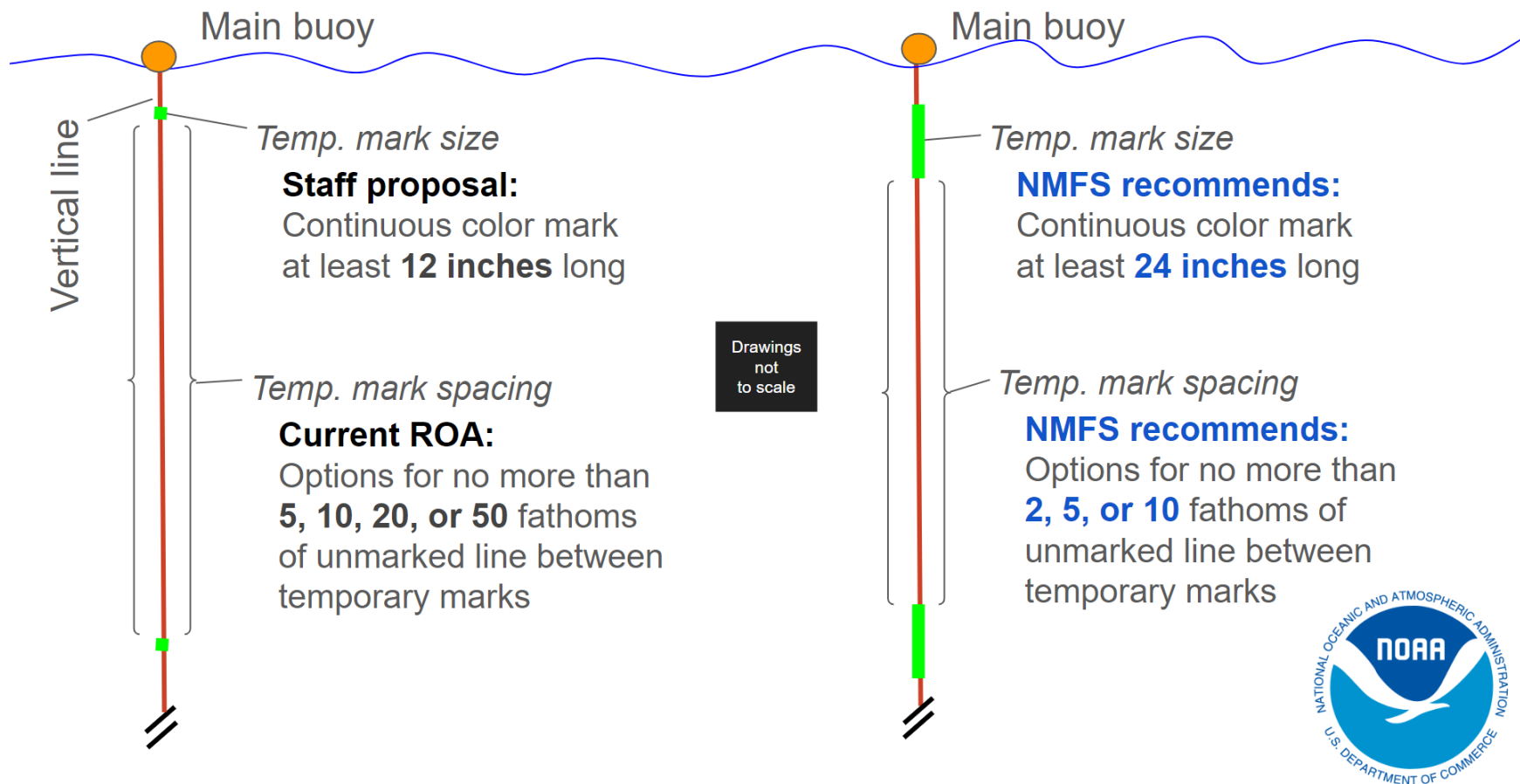


Figure 1. Diagram illustrating temporary marking alternatives for vertical lines based on the staff proposal in F.6 Attachment 2 (left) and NMFS' recommendations in this report (right).