

2.0 SUMMARY OF THE ALTERNATIVES

NOAA Fisheries considered the following alternatives, ranging from no action to a total prohibition of the gear type, to reduce the incidental catch and bycatch mortality of sea turtles in the pelagic longline fishery for Atlantic HMS. In response to public comment, NOAA Fisheries modified alternatives A5 and A10. Alternatives A5 (a) and A10 (a) are the alternatives as described in the DSEIS; alternatives A5 (b) and A10 (b) reflect the modifications. Alternatives A5 (b), A10 (b), and A16 are currently preferred. Alternatives A6, A11, and A12 were considered but not further analyzed. The ecological, economic, and social impacts of the other alternatives are discussed in later chapters.

2.1 BYCATCH AND BYCATCH MORTALITY MITIGATION MEASURES

Alternative A1 Maintain existing hook and bait restrictions in the Atlantic pelagic longline fishery; maintain existing time/area closures in the Atlantic pelagic longline fishery; maintain existing possession and use requirements for bycatch mitigation gear (dipnets and line clippers), as well as sea turtle handling and release guidelines, as currently specified by NOAA Fisheries. (No Action)

This alternative would maintain existing regulations regarding Atlantic pelagic longline gear and sea turtle interactions, including the closure of the Northeast Distant Statistical Reporting Area (NED) (20° to 60° West longitude, 35° to 55° North latitude) to all federally permitted vessels, or vessels required to be permitted, for Atlantic HMS with pelagic longline gear on board.

Alternative A2 Limit vessels with pelagic longline gear onboard, at all times, in all areas open to pelagic longline fishing, excluding the NED, to possessing onboard and/or using only 18/0 or larger circle hooks with an offset not to exceed 10 degrees and whole mackerel bait.

This alternative would limit vessel operators participating in the pelagic longline fishery for Atlantic HMS operating outside of the NED, at all times, to possessing and/or using only 18/0 or larger circle hooks with an offset not to exceed 10 degrees. Vessel operators aboard such vessels would be allowed to possess and/or use only whole mackerel bait. This alternative would maintain the current requirement for possession or use of non-stainless steel corrodible hooks, and the live-bait restriction in the western Gulf of Mexico for vessels participating in this fishery.

Alternative A3 Limit vessels with pelagic longline gear onboard, at all times, in all areas open to pelagic longline fishing, excluding the NED, to possessing onboard and/or using only one of the following combinations: i) 18/0 or larger circle hooks with an offset not to exceed 10 degrees and whole mackerel bait; **OR** ii) 18/0 or larger non-offset (flat) circle hooks and squid bait.

This alternative would limit vessel operators participating in the pelagic longline fishery for Atlantic HMS operating outside of the NED, at all times, to possessing and/or using no more than one of the following hook and bait combinations: i) 18/0 or larger circle hooks with an offset not to exceed 10 degrees and whole mackerel bait; **OR** ii) 18/0 or larger non-offset (flat) circle hooks and squid bait. This alternative would maintain the current requirement for possession or use of non-stainless steel corrodible hooks, and the live-bait restriction in the western Gulf of Mexico for vessels participating in this fishery.

Alternative A4 Limit vessels with pelagic longline gear onboard, at all times, in all areas open to pelagic longline fishing, excluding the NED, to possessing onboard and/or using only one of the following combinations: i) 18/0 or larger circle hook with an offset not to exceed 10 degrees and whole mackerel bait; **OR** ii) 18/0 or larger non-offset circle hooks and squid bait; **OR** iii) 9/0 “J”-hooks with an offset not to exceed 25 degrees and whole mackerel bait.

This alternative would limit vessel operators participating in the pelagic longline fishery for Atlantic HMS operating outside of the NED, at all times, to possessing and/or using no more than one of the following hook and bait combinations: i) 18/0 or larger circle hooks with an offset not to exceed 10 degrees and whole mackerel bait; **OR** ii) 18/0 or larger non-offset circle hooks and squid bait; **OR** iii) 9/0 “J”-hook with an offset not to exceed 25 degrees and whole mackerel bait. This alternative would maintain the current requirement for possession or use of non-stainless steel corrodible hooks, and the live-bait restriction in the western Gulf of Mexico for vessels participating in this fishery.

Alternative A5 (a) Limit vessels with pelagic longline gear onboard, at all times, in all areas open to pelagic longline fishing, excluding the NED, to possessing onboard and/or using only 16/0 or larger circle hooks with an offset not to exceed 10 degrees.

This alternative would limit vessel operators participating in the pelagic longline fishery for Atlantic HMS operating outside of the NED, at all times, to possessing and/or using only 16/0 or larger circle hooks with an offset not to exceed 10 degrees. This alternative would maintain the current requirement for possession or use of non-stainless steel corrodible hooks, and the live-bait restriction in the western Gulf of Mexico for vessels participating in this fishery.

Alternative A5 (b) *Limit vessels with pelagic longline gear onboard, at all times, in all areas open to pelagic longline fishing, excluding the NED, to possessing onboard and/or using only 16/0 or larger non-offset circle hooks and/or 18/0 or larger circle hooks with an offset not to exceed 10 degrees. Only whole finfish and squid baits may be possessed and/or utilized with allowable hooks. (Preferred Alternative)*

This alternative would limit vessel operators participating in the pelagic longline fishery for Atlantic HMS operating outside of the NED, at all times, to possessing onboard and/or using only 16/0 or larger non-offset circle hooks and/or 18/0 or larger circle hooks with an offset not to exceed 10 degrees. Only whole finfish and squid baits may be possessed and/or utilized with allowable hooks. This alternative would maintain the current requirement for possession or use of non-stainless steel corrodible hooks, and the live-bait restriction in the western Gulf of Mexico for vessels participating in this fishery.

Alternative A6 Allow pelagic longline fishing for Atlantic HMS in the NED, maintaining existing hook restrictions.

This alternative would re-open the NED to pelagic longline fishing for Atlantic HMS and maintain existing hook restrictions. The NED area was closed to pelagic longline fishing to reduce sea turtle interactions, and was the subject of a three-year research experiment investigating sea turtle mitigation measures. Re-opening this area without implementation of additional bycatch measures would result in an unacceptable increase in sea turtle interactions, inconsistent with NS 9 of the MSA, which requires minimization of bycatch and bycatch mortality to the extent practicable. Therefore, this alternative is not further analyzed in this rulemaking but may be considered, if appropriate and necessary, in a future rulemaking.

Alternative A7 Open the NED to pelagic longline fishing and limit vessels with pelagic longline gear onboard in that area, at all times, to possessing onboard and/or using only 18/0 or larger circle hooks with an offset not to exceed 10 degrees and whole mackerel bait.

This alternative would re-open the NED to pelagic longline fishing for Atlantic HMS and limit vessels with pelagic longline gear onboard in that area, at all times, to possessing and/or using only 18/0 or larger circle hooks with an offset not to exceed 10 degrees and whole mackerel bait. This alternative would maintain the current requirement for possession or use of non-stainless steel corrodible hooks for vessels participating in this fishery.

Alternative A8 Open the NED to pelagic longline fishing and limit vessels with pelagic longline gear onboard in that area, at all times, to possessing onboard and/or using only 20/0 or larger circle hooks with an offset not to exceed 10 degrees and whole mackerel bait.

This alternative would re-open the NED to pelagic longline fishing for Atlantic HMS and limit vessels with pelagic longline gear onboard in that area, at all times, to possessing and/or using only 20/0 or larger circle hooks with an offset not to exceed 10 degrees and whole mackerel bait. This alternative would maintain the current requirement for possession or use of non-stainless steel corrodible hooks for vessels participating in this fishery.

Alternative A9 Open the NED to pelagic longline fishing and limit vessels with pelagic longline gear onboard in that area, at all times, to possessing onboard

and/or using only one of the following combinations: i) 9/0 “J”-hook with an offset not to exceed 25 degrees and whole mackerel bait; **OR** ii) 18/0 or larger circle hook with an offset not to exceed 10 degrees with whole mackerel bait.

This alternative would re-open the NED to pelagic longline fishing for Atlantic HMS and limit vessels with pelagic longline gear onboard in that area, at all times, to possessing and/or using no more than one of the following hook and bait combinations: i) 9/0 “J”-hook with an offset not to exceed 25 degrees and whole mackerel bait; **OR** ii) 18/0 or larger circle hook with an offset not to exceed 10 degrees with whole mackerel bait. This alternative would maintain the current requirement for possession or use of non-stainless steel corrodible hooks for vessels participating in this fishery.

Alternative A10 (a) Open the NED to pelagic longline fishing and limit vessels with pelagic longline gear onboard in that area, at all times, to possessing onboard and/or using only one of the following combinations: i) 18/0 or larger circle hook with an offset not to exceed 10 degrees with whole mackerel bait; **OR** ii) 18/0 or larger non-offset (flat) circle hook with squid bait.

This alternative would re-open the NED to pelagic longline fishing for Atlantic HMS and limit vessels with pelagic longline gear onboard in that area, at all times, to possessing and/or using no more than one of the following hook and bait combinations: i) 18/0 or larger circle hook with an offset not to exceed 10 degrees and whole mackerel bait; **OR** ii) 18/0 or larger non-offset (flat) circle hook and squid bait. This alternative would maintain the current requirement for possession or use of non-stainless steel corrodible hooks for vessels participating in this fishery.

Alternative A10 (b) *Open the NED to pelagic longline fishing and limit vessels with pelagic longline gear onboard in that area, at all times, to possessing onboard and/or using only 18/0 or larger circle hooks with an offset not to exceed 10 degrees. Only whole mackerel and squid baits may be possessed and/or utilized with allowable hooks. (Preferred Alternative)*

This alternative would re-open the NED to pelagic longline fishing for Atlantic HMS and limit vessels with pelagic longline gear onboard in that area, at all times, to possessing and/or using only 18/0 or larger circle hooks with an offset not to exceed 10 degrees. Only whole mackerel and squid baits may be possessed and/or utilized with allowable hooks. This alternative would maintain the current requirement for possession or use of non-stainless steel corrodible hooks for vessels participating in this fishery.

Alternative A11 Prohibit the use of pelagic longline gear in Atlantic HMS fisheries.

This alternative would prohibit the use of pelagic longline gear by all U.S.-flagged vessels targeting HMS in the Atlantic Ocean. At this time, appropriate reductions in sea turtle interactions and mortalities may be achieved through other measures examined in this document,

with less significant adverse social and economic impacts, consistent with NS 8 under the MSA, which requires minimization of adverse economic impacts to the extent practicable. Therefore, this alternative is not further analyzed in this rulemaking but may be considered, if necessary and appropriate, in a future rulemaking.

Alternative A12 Prohibit the use of pelagic longline gear in HMS fisheries in the western Gulf of Mexico year-round (12 months).

This alternative would prohibit the use of pelagic longline gear by all U.S. flagged-vessels targeting HMS in the U.S. Exclusive Economic Zone (EEZ) of the western Gulf of Mexico (GOM), west of 88 degrees West longitude, where large numbers of sea turtles have been observed and reported caught, year-round. At this time, appropriate reductions in sea turtle interactions and mortalities may be achieved through other measures examined in this document, with less significant adverse social and economic impacts, consistent with NS 8 under the MSA, which requires minimization of adverse economic impacts to the extent practicable. Therefore, this alternative is not further analyzed in this rule making but may be considered, if necessary and appropriate, in a future rulemaking.

Alternative A13 Prohibit the use of pelagic longline gear in HMS fisheries in an area of the central Gulf of Mexico year-round (12 months).

This alternative would prohibit the use of pelagic longline gear by all U.S. flagged-vessels targeting HMS in a portion of the central GOM, where large numbers of sea turtles have been observed and reported caught, year round. This closure would encompass approximately 25,489 nm² and would be defined as the area within the following coordinates, beginning with the northeastern corner and proceeding clockwise: 28°09' N. latitude (Lat.), 88°12' W. longitude (Long.); 27°06' N. Lat., 88°12' W. Long.; 25°46' N. Lat., 90°24' W. Long.; 26°17' N. Lat., 93°03' W. Long.; 26°51' N. Lat., 93°03' W. Long.; 28°09' N. Lat., 90°10' W. Long..

Alternative A14 Prohibit the use of pelagic longline gear in HMS fisheries in portions of the central Gulf of Mexico and the Northeast Coastal Statistical Reporting Area year-round (12 months).

This alternative would prohibit the use of pelagic longline gear by all U.S. flagged-vessels targeting HMS in portions of the central GOM and the Northeast Coastal Statistical Reporting Area (NEC), where large numbers of sea turtles have been observed and reported caught, year-round. These closures encompass approximately 56,471 nm² in aggregate. The GOM portion of the closure is identical to the GOM closure area in alternative A13, thus the boundary coordinates are not repeated here. The NEC portion of the closure would encompass approximately 30,982 nm² and would be defined as the area within the following coordinates beginning with the northeastern corner and proceeding clockwise: 41°08' N. Lat., 66°06' W. Long.; 38°37' N. Lat., 65°16' W. Long.; 37°25' N. Lat., 69°18' W. Long.; 39°55' N. Lat., 70°05' W. Long.

Alternative A15 Prohibit the use of pelagic longline gear in HMS fisheries in portions of the Central Gulf of Mexico and the Northeast Coastal Statistical Reporting Area from May through October (6 months).

This alternative would prohibit the use of pelagic longline gear by all U.S. flagged-vessels targeting HMS in portions of the central GOM and the Northeast Coastal Statistical Reporting Area (NEC), where large numbers of sea turtles have been observed and reported caught, from May through October (6 months). The GOM and NEC closure is identical to the area described in alternative A14, thus the boundary coordinates are not repeated here.

Alternative A16 *Require vessels with pelagic longline gear onboard to possess and use dipnets and line clippers that meet newly revised design and performance standards, plus require these vessels to possess, maintain, and utilize additional sea turtle handling and release gear and comply with handling and release guidelines, as specified by NOAA Fisheries. (Preferred Alternative)*

This alternative would require vessel operators aboard all federally permitted vessels, or those required to be permitted, for Atlantic HMS with pelagic longline gear onboard to possess, maintain, and utilize line cutters and dipnets meeting revised design and performance standards as well as require vessel operators to possess, maintain, and utilize additional equipment to facilitate the removal of fishing gear from incidentally captured sea turtles. As described in Appendix B1, this additional equipment would include: A- (1) long-handled line cutter; B- (1) long-handled dehooker for ingested hooks; C- (1) long-handled dehooker for external hooks (the long-handled dehooker for ingested hooks used for item B will also satisfy this requirement); D- (1) long-handled device to pull an “Inverted V” (if 6’ J-style dehooker is used for item C, it will also satisfy this requirement); E- (1) dipnet; F- (1) standard automobile tire; G- (1) short-handled dehooker for ingested hooks; H- (1) short-handled dehooker for removing external hooks (the short-handled dehooker for ingested hooks used for item G will also satisfy this requirement); I- (1) long-nose or needle-nose pliers; J- (1) monofilament line cutter; K- (1) bolt cutter; and, L- (2) types of mouth openers/mouth gags.

Items A - D would be required for sea turtles not boated. Items E - L would be required for sea turtles boated. This equipment must be used in accordance with the handling and release guidelines specified by NOAA Fisheries.

References Cited in Chapter 2

No references cited

