Part III

Department of Commerce

National Oceanic and Atmospheric Administration

50 CFR Parts 229 and 665

Taking of Marine Mammals Incidental to Commercial Fishing Operations; False Killer Whale Take Reduction Plan; Final Rule
DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration

50 CFR Parts 229 and 665
[Docket No. 110131070–2626–02]

RIN 0648–BA30

Taking of Marine Mammals Incidental to Commercial Fishing Operations; False Killer Whale Take Reduction Plan

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Final rule.

SUMMARY: We, NMFS, issue the final False Killer Whale Take Reduction Plan (FKWTRP), and regulatory measures and non-regulatory measures and recommendations to reduce mortalities and serious injuries of false killer whales in Hawaii-based longline fisheries. Regulatory measures include gear requirements, longline prohibited areas, training and certification in marine mammal handling and release, and posting of NMFS-approved placards on longline vessels. In this rule, NMFS also recommends research and data collection programs. This final rule also revises the boundaries of the longline prohibited area around the main Hawaiian Islands to be consistent with the prohibited area established under the FKWTRP regulations. The FKWTRP is based on consensus recommendations submitted to NMFS by the False Killer Whale Take Reduction Team (Team), with certain modifications described herein that were determined to be necessary to meet the requirements of the MMPA. This final rule is necessary because current mortality and serious injury levels of the Hawaii Pelagic and Hawaii Insular stocks of false killer whales incidental to the Hawaii-based pelagic longline fisheries are above the stocks’ potential biological removal (PBR) levels, and are therefore inconsistent with the short- and long-term goals of the Marine Mammal Protection Act (MMPA). The FKWTRP is intended to meet the requirements of the MMPA.

DATES: This rule is effective December 31, 2012, except for the addition of §§ 229.3(v) and 229.37(c), which are effective February 27, 2013.

ADDRESSES: This final rule (the False Killer Whale Take Reduction Plan, or FKWTRP), the final Environmental Assessment, Regulatory Impact Review, and Final Regulatory Flexibility Analysis, the proposed rule (proposed FKWTRP), the FKWTRP compliance guide, the recommendations submitted by the Team (the Draft FKWTRP), references, and other background documents are identified by NOAA–NMFS–2011–0042 and are available at www.regulations.gov, at the Take Reduction Team web site: www.nmfs.noaa.gov/pr/interactions/trt/falsekillerwhale.htm, or by submitting a request to the Regulatory Branch Chief, NMFS Pacific Islands Region (PIR), 1601 Kapiolani Blvd., Suite 1110, Honolulu, HI 96814.

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SUPPLEMENTARY INFORMATION:

Background

This final rule, which serves as the final FKWTRP, implements regulatory and non-regulatory measures recommended by the Team, with some modifications, to satisfy the requirements of the MMPA. Details concerning the justification for and development of this FKWTRP were provided in the proposed rule (76 FR 42082, July 18, 2011) and are not repeated here. NMFS requested public comment on the proposed rule and provided a 90-day public comment period. In addition, one Team meeting was conducted during the 90-day public comment period. Below, we provide information on the affected false killer whale stocks, describe the final FKWTRP management measures, summarize the public comments received and provide responses, and describe changes made to the proposed regulations based on the comments.

Distribution and Stock Structure of False Killer Whales in the Pacific Islands Region

False killer whales are found worldwide mainly in tropical and warm-temperate waters (Stacey et al., 1994). In the North Pacific, this species is well known from southern Japan, Hawaii, and the eastern tropical Pacific. There are six stranding records from Hawaiian waters (Nitta, 1991; Maldini et al., 2005). One on-effort sighting of false killer whales was made during a NMFS 2002 shipboard survey and six during a 2010 shipboard survey of waters within the U.S. Exclusive Economic Zone (EEZ) around the Hawaii Archipelago (Barlow, 2006; Bradford et al., 2012). Smaller-scale surveys conducted around the main Hawaiian Islands (MHI) show that false killer whales are also encountered in nearshore waters there (Mobley et al., 2000; Baird et al., 2008), and sightings during the 2010 shipboard survey reveal that the species also occurs near shore in the Northwestern Hawaiian Islands (NWHI; Baird et al., 2012). This species also occurs in the U.S. EEZ around Palmyra Atoll, Johnston Atoll (NMFS unpublished data), and American Samoa (Johnston et al., 2008; Oleson, 2009; Carretta et al., 2012a).

In the MMPA draft 2012 Stock Assessment Report (SAR), there are five Pacific Islands Region management stocks of false killer whales: (1) The Hawaii Insular stock, which includes false killer whales inhabiting waters within 140 km (approximately 75 nm) of the MHI; (2) the NWHI stock, which includes false killer whales inhabiting waters within 93 km (50 nm) of the NWHI and Kauai; (3) the Hawaii Pelagic stock, which includes false killer whales inhabiting waters greater than 40 km (22 nm) from the MHI; (4) the Palmyra Atoll stock, which includes false killer whales found within the U.S. EEZ around Palmyra Atoll; and (5) the American Samoa stock, which includes false killer whales found within the U.S. EEZ around American Samoa (Carretta et al., 2012a). For reasons described in the Federal Register notice establishing the Team (75 FR 2853, January 19, 2010), the American Samoa stock was not included in the scope of the Team’s discussions. The new refined NWHI stock was also not included in the scope of the Team’s discussions because the survey information was not yet available. Neither stock is described further in this final FKWTRP.

Moreover, because the 2010 survey information only recently became available, this FKWTRP incorporates abundance estimates for the Hawaii Pelagic and Hawaii Insular Stocks that were not considered by the Team or identified in the proposed rule. However, these new abundance estimates do not change any of the regulatory or non-regulatory measures identified in the proposed rule, and are used primarily to supplement and explain existing information in the record, including the determination of each stock’s current PBR. The Team was advised at various meetings of the ongoing cetacean survey and data analysis, and of the likelihood that abundance estimates and PBR for the Hawaii Pelagic stock of false killer whales would increase somewhat.

Both the Team’s consensus FKWTRP and the proposed FKWTRP identified a
process for closing an area to deep-set longline fishing based, in part, on PBR and abundance estimates that would change as new information became available.

The non-strategic Palmyra Atoll stock of false killer whales was included in the scope of the Team’s discussions (see Notice of Establishment of a False Killer Whale Take Reduction Team and Meeting, 75 FR 2853, January 19, 2010), the Team’s recommendations (FKWTRT, 2010), and NMFS’ proposed Plan (76 FR 42082, July 18, 2011). MMFA Section 118(9)(1) provides that NMFS may develop take reduction plans for non-strategic marine mammal stocks interacting with a Category I fishery if NMFS determines, after notice and opportunity for public comment, that the fishery has a high level of mortalities and serious injuries (M&S) across a number of such marine mammal stocks. The MMPA does not further define the term “high level”. However, evaluation of the fishery’s M&S compared to PBR for the non-strategic marine mammals taken in the fishery, as presented in the final 2011 SARs (Carretta et al., 2012b; assessments for these stocks were not updated in the draft 2012 SARs), indicate levels of M&S (i.e., between 0 and 4.7 percent of PBR) across seven stocks that meet the insignificance threshold set forth in 50 CFR 229.2. Accordingly, NMFS does not consider this level of M&S of non-strategic marine mammal stocks to be a “high level” for purposes of including these stocks in a take reduction plan.

Therefore, NMFS is not including any non-strategic marine mammal stocks, including the Palmyra Atoll stock, in the scope of this final Plan.

Abundance Estimates and Potential Biological Removal Levels

Hawaii Insular Stock of False Killer Whales

A Status Review for the Hawaii Insular stock (Oleson et al., 2010) used recent, unpublished abundance estimates for two time periods, 2000–2004 and 2006–2009 in their Population Viability Analysis (PVA). Two separate estimates for 2006–2009 were presented in the Status Review, 151 (coefficient of variation, or CV=0.20; the CV is a measurement of the variation in the data, and is calculated as the ratio of the standard deviation to the mean) and 170CV=0.21, depending on whether animals photographed near Kauai are included in the estimate (Baird, unpublished data). As the animals seen near Kauai have now been associated with the NWHI stock (Baird et al., 2012), the best estimate of population size is taken as the smaller estimate (Carretta et al., 2012a). However, it should be noted that even this smaller estimate may be an overestimate, because missed matches were discovered after the mark-recapture analyses were complete (discussed in Oleson et al., 2010; Carretta et al., 2012a).

The minimum population estimate for the Hawaii Insular stock of false killer whales is the number of distinct individuals identified during the 2008–2011 photo-identification studies, which is 129 false killer whales (Baird, Hawaii insular false killer whale catalog; Carretta et al., 2012a). No data are available on current or maximum net productivity rate for this stock. NMFS proposed to list the Hawaiian Insular population of false killer whales (defined to be the same as the Hawaii Insular stock) as an endangered distinct population segment (DPS) under the ESA (75 FR 70169, November 17, 2010).

The MMPA, section 3(20) defines PBR as the “maximum number of animals, excluding mortalities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population." PBR is calculated as the product of minimum population size, one-half the maximum productivity rate, and a recovery factor (MMPA Sec. 3(20), 16 U.S.C. 1362). The PBR level for the Hawaii Insular false killer whale stock is calculated as the minimum population size (129) times one-half the default maximum net growth rate for cetaceans (one-half of 4 percent) times a recovery factor of 0.1, resulting in a PBR of 0.3 false killer whales per year, as of the draft 2012 SAR (Carretta et al., 2012a). The recovery factor reported in the SAR (Carretta et al., 2012a) was chosen to be 0.1 because the stock has been proposed for listing as endangered under the U.S. Endangered Species Act and because of the significant recent decline experienced by this stock (Oleson et al. 2010).

Hawaii Pelagic Stock of False Killer Whales

An abundance survey of the U.S. EEZ around Hawaii (Hawaiian Islands Cetacean and Ecosystem Assessment Survey, or HICEAS) was completed in 2010 and resulted in five on-effort detections of false killer whales attributed to the Hawaii Pelagic stock. Recent analysis of the 2010 shipboard line-transect survey resulted in an abundance estimate of 1,503 (CV=0.66) false killer whales (Bradford et al., 2012) outside of 40 km (22 nm) of the MHI. Behaviors observed and assessment of the line-transect detection function indicate that false killer whales are attracted to the survey vessel (Bradford et al., 2012). The abundance estimate has not been corrected for vessel attraction and is considered an over-estimate of population abundance. The acoustic data collected during the 2010 survey are still being analyzed such that additional refinements to this estimate are expected. A 2005 survey (Barlow and Rankin, 2007) resulted in a separate abundance estimate of 906 (CV = 0.68) false killer whales in international waters south of the U.S. EEZ around Hawaii and within the U.S. EEZ around Johnston Atoll, but it is unknown how many of these animals might belong to the Hawaii Pelagic stock.

The log-normal 20th percentile (“Nmin”) of the 2010 abundance estimate for the U.S. EEZ around Hawaii outside of 40 km (22 nm) from the MHI (Bradford et al., 2012) is 906 false killer whales. This Nmin has not been corrected for vessel attraction and may be an over-estimate of minimum population size. No data are available on current population trend or on current or maximum net productivity rate for this stock.

Following the NMFS Guidelines for Assessing Marine Mammal Stocks (GAMMS) (NMFS, 2005a), the PBR is calculated only within the U.S. EEZ around Hawaii because abundance estimates and estimates of human-caused M&S from all U.S. and non-U.S. sources are not available for the high seas where this stock also occurs. The PBR level for the Hawaii Pelagic stock of false killer whale is thus calculated as the minimum population size within the U.S. EEZ around Hawaii (906) times one-half the default maximum net growth rate for cetaceans (one-half of 4 percent) times a recovery factor of 0.5 (for a stock of unknown status with the CV of the M&S rate in the U.S. EEZ around Hawaii equal to 0.3; Wade and Angliss, 1997), resulting in a PBR of 9.1 false killer whales per year, as of the draft 2012 SAR (Carretta et al., 2012a).

Mortality and Serious Injury Estimates

The total observed M&S of cetaceans in the shallow-set longline fishery (with 100 percent observer coverage) and the estimated annual and 5-year average M&S of cetaceans in the deep-set longline fishery (based on approximately 20 percent observer coverage) are reported by McCracken (2011). The methodology includes prorating all estimated incidental takes of false killer whales and observed takes for which an injury severity determination could not be made, based on the proportions of observed interactions that resulted in death or serious injury (99 percent), or non-
serious injury (7 percent) between 2000 and 2010. Further, incidental takes of false killer whales of unknown stock origin within the Hawaii Insular/Pelagic stock overlap zone are prorated using a model that assumes that the density of the Hawaii Insular stock decreases and the density of the Hawaii Pelagic stock increases with increasing distance from shore (McCracken, 2010a). No genetic samples are available to establish stock identity for these incidental takes within the Hawaii Insular/Pelagic stock overlap zone, but both stocks are considered by NMFS to be at risk of interacting with longline gear within this region. Finally, incidental takes of unidentified cetaceans, known to be either false killer whales or short-finned pilot whales (together termed “blackfish”), are determined using a formula that prorates takes to the stocks based on their distance from shore (McCracken, 2010a). Proration of false killer whales takes within the overlap zone and of unidentified blackfish introduces additional, yet unquantified, uncertainty into the bycatch estimates, but until methods of determining stock identity for animals observed incidentally taken within the overlap zone are available, and all animals taken can be identified to species (e.g., photos, tissue samples), this approach ensures that potential impact to all stocks are assessed and accounted for.

Based on these bycatch analyses, estimates of annual and 5-year average annual incidental M&SI of false killer whales, by stock and U.S. EEZ area, are presented in the draft 2012 SAR (Carretta et al., 2012a). The estimate for the Hawaii Pelagic stock occurring inside the U.S. EEZ around Hawaii was 13.6 false killer whales per year (CV = 0.3) in the deep-set fishery and 0.2 in the shallow-set fishery, for a total of 13.8 false killer whales per year (CV = 0.3). Using data from 2006–2010, the mean estimated annual incidental M&SI of false killer whales in the Hawaii Pelagic stock occurring outside of the U.S. EEZ was 11.2 (CV = 0.3) in the deep-set fishery and 0.1 in the shallow-set fishery, for a total of 11.3. The mean estimated annual incidental M&SI of false killer whales in the Hawaii Insular stock was 0.5 false killer whales per year (CV = 1.7) in the deep-set fishery and 0 false killer whales per year in the shallow-set fishery.

Goals of the FKWTRP

Incidental M&SI of the Hawaii Pelagic and Hawaii Insular stocks of false killer whales in the Hawaii-based longline fisheries in the overlap zone exceed the stocks’ PBR levels (Carretta et al., 2012a). The short-term goal of the FKWTRP is to reduce, within six months of its implementation, M&SI of the Hawaii Pelagic and Hawaii Insular stocks of false killer whales incidental to the Hawaii-based longline fisheries occurring within the U.S. EEZ around Hawaii to less than the stocks’ PBR levels of 9.1 and 0.3 false killer whales per year, respectively (Carretta et al., 2012a).

The Hawaii Pelagic stock is a transboundary stock that inhabits waters both within and outside of the U.S. EEZ around Hawaii; however, the extent of the stock’s range into the high seas is unknown. The Hawaii-based longline fisheries operate both within the U.S. EEZ and on the high seas, and incidental M&SI of the Hawaii Pelagic stock of false killer whales have been documented both within the U.S. EEZ and on the high seas. Better information on the full geographic range of this stock and bycatch estimates in international fisheries are needed to better understand the impacts of false killer whale incidental takes on the high seas. However, these data gaps do not affect the Hawaii Pelagic false killer whale stock’s designation as “strategic” (i.e., the level of human-caused mortality exceeds the stock’s PBR level; 16 U.S.C. 1362(19)(A)). To ensure that conservation measures of the FKWTRP would not simply displace fishing effort and its corresponding impacts on the Hawaii Pelagic false killer whale from the U.S. EEZ to the high seas, a goal of the FKWTRP is that incidental M&SI of the high seas component of the Hawaii Pelagic stock does not increase above current levels (i.e., 11.2 false killer whales per year, as of the draft 2012 SAR, Carretta et al., 2012a).

The long-term goal of the proposed FKWTRP is to reduce, within five years of its implementation, the incidental M&SI of the Hawaii Pelagic and Hawaii Insular stocks of false killer whales to insignificant levels approaching a zero mortality and serious injury rate (i.e., less than 10 percent of their respective PBR levels), as determined under 50 CFR 229.2.

Components of the FKWTRP

The final FKWTRP includes both regulatory and non-regulatory measures, as well as a suite of research recommendations. While the primary focus of the FKWTRP involves the Hawaii-based deep-set longline fishery, there are measures and research that apply to other fisheries known or suspected to interact with false killer whales.

NMFS believes the suite of measures described below are currently appropriate for meeting the goals of the FKWTRP, but anticipates that new information on the biology, distribution, abundance, and stock structure of false killer whales, as well as on the extent and nature of interactions between commercial fisheries and false killer whales, will become available in the future. Similarly, future innovations in fishing gear and/or fishing methods may change the extent and nature of interactions between commercial fisheries and false killer whales. As such, NMFS and the Team agreed to evaluate the success of the final FKWTRP at periodic intervals over the next several years, and to consider amending the FKWTRP, if warranted, based on the results of ongoing monitoring, research, and evaluation.

NMFS incorporated nearly all of the Team’s consensus recommendations from the Draft FKWTRP into the proposed and final FKWTRP, with some modifications. Changes from the Team’s consensus recommendations are noted, along with the rationale for any changes. The Team also discussed other recommendations and conservation measures that were not included in their consensus recommendations for various reasons (e.g., did not meet MMPA goals). Information on these can be reviewed in the Draft FKWTRP (FKWTRT, 2010). Finally, the Team made additional recommendations regarding the shortline and kake line fisheries, other fisheries, and foreign fisheries that are outside the scope of this rulemaking. Those recommendations are not part of this final FKWTRP, but may be informative for future Team deliberations. Those detailed recommendations can be found in section 8.4 of the Draft FKWTRP (FKWTRT, 2010).

Regulatory Measures

NMFS issues the following FKWTRP regulatory measures under MMPA authority:

1. Require the use of circle hooks that have a maximum wire diameter of 4.5 mm (0.177 in), 10 degree offset or less, containing round (non-flattened) wire that can be measured with a caliper or other appropriate gauge in the Hawaii-based deep-set fishery:
   
   2. Establish a minimum 2.0 mm (0.079 in) diameter for monofilament leaders and branch lines, and a minimum breaking strength of 400 pounds (181 kg) for any other material used in the construction of a leader or branch line in the Hawaii-based deep-set longline fishery:
   
   3. Establish a longline exclusion zone around the MEI that is closed to longline fishing year-round; the 282,796 km² (82,450 mi²) area has the same
name and boundary as the February–September boundary of the MHI Longline Prohibited Area described in 50 CFR 665.806(a)(2):
4. Expand the content of the existing, mandatory Protected Species Workshop for the Hawaii-based longline fishery to include new information on marine mammal interaction mitigation techniques;
5. Require a NMFS-approved marine mammal handling and release informational placard to be posted onboard all Hawaii-based longline vessels;
6. Require the captain of the longline vessel to supervise the handling and release of any hooked or entangled marine mammal;
7. Require a NMFS-approved placard that instructs the vessel crew to notify the captain in the event of a marine mammal interaction be posted onboard all Hawaii-based longline vessels; and
8. Establish a “Southern Exclusion Zone” (SEZ) that will be closed to the commercial Hawaii-based deep-set longline fishery for varying periods of time whenever specific levels of serious injuries or mortalities of false killer whales are observed within the U.S. EEZ around Hawaii.

Additionally, under the authority of the Magnuson-Stevens Fishery Conservation and Management Act (MSA), NMFS is revising the regulations in 50 CFR 665.806 prescribing the existing MHI longline fishing prohibited area by removing the seasonal boundary change. This action will align the boundary of the MHI longline prohibited area with those of the prohibited area established under this FKWTRP, and is necessary to ensure that existing regulations applicable to the management of the longline fishery are consistent with the requirements of the FKWTRP and the MMPA (see measure 3. above).

These measures are more fully described below.

1. Hook Requirements

Shape. NMFS is requiring that vessels on declared deep-set trips must use only circle hooks, as recommended by the Team and proposed by NMFS. Analysis of observer data and predictive simulations indicate that the exclusive use of circle hooks in the deep-set longline fishery would likely reduce the number of false killer whale incidental takes (i.e., prevent some hookings) by approximately 6 percent, and may reduce the severity of injuries following interactions (FKWTRP, 2010; Forney et al., 2011). Circle hooks are also generally weaker (i.e., straighten with less force) than the Japanese-style tuna hooks used by a portion of the longline fleet, so some false killer whales that are hooked in the lip, jaw, body, or flukes may be able to pull free more easily (i.e., straighten the hook) if tension is placed on the line. Thus, the required use of circle hooks may further reduce the number of incidental M&SI of false killer whales in the deep-set longline fishery.

Size. This final rule does not include a specification of size for circle hooks in the deep-set fishery. NMFS is concerned that the maximum size specification of 16/0 that was proposed by NMFS would preclude the use of larger circle hooks (e.g., size 18/0) that are known to be effective in reducing bycatch of other protected species, such as sea turtles, in other fisheries. Currently there is no information to indicate that use of smaller circle hooks results in injuries to false killer whales that are less serious compared to larger circle hooks. See comment/response 31 for more details.

Wire diameter. NMFS proposed the required use of “weak” circle hooks in the deep-set fishery. “Weak” hooks exploit the size and weight disparity between the fishery’s target species and other species, and promote the release of larger, non-target or bycatch species (Bigelow et al., 2011). In this case, hooks are expected to be strong enough to retain target bigeye tuna catch, but should bend and straighten under the pull strain of a hooked false killer whale, allowing the animal to release itself and thereby reduce the severity of the animal’s injury.

Wire diameter is one characteristic of a hook that contributes to its strength. During the development of the Draft and proposed FKWTRP’s, NMFS and the Team understood that the “standard” wire diameter of circle hooks used in the deep-set fishery was 4.5 mm (0.177 in), based on the information available at that time. Based on this understanding, the Team concluded that the use of circle hooks of 4.0 mm (0.157 in) or 4.2 mm (0.165 in) would provide even greater conservation benefits, because a false killer whale may be able to more easily straighten and release itself from a weaker hook, possibly resulting in less serious injuries. The Team recommended the required use of circle hooks with a maximum wire diameter of 4.0 mm (0.157 in), if a new research study was conducted and showed that the weaker hooks had no significant negative impacts on the retention of target species catch. If the analysis demonstrated that the use of 4.0 mm circle hooks would have a substantial impact on tuna catch rates, the Team recommended additional trials to test whether 4.2 mm (0.165 in) hooks would have a substantial impact on tuna catch rates. NMFS, in collaboration with the longline industry and other partners, conducted the research in October–December 2010 and found no significant impact to target catch of circle hooks with wire diameter of 4.0 mm (0.157 in) compared to 4.5 mm (0.177 in) (Bigelow et al., 2011). NMFS did not conduct trials with 4.2 mm (0.165 in) hooks. The Team’s recommendations and the results of the study formed the basis of NMFS’ proposed requirement that the wire diameter of circle hooks in the deep-set longline fishery must not exceed 4.0 mm (0.157 in).

Two significant issues regarding the wire diameter requirement were raised during the public comment period. First, commenters and Team members emphasized that the Bigelow et al. (2011) study was not adequate to determine the potential effects of the weak hooks in the deep-set fishery. Specifically, commenters noted that the study was not conducted during the time of year when the largest bigeye tuna are historically caught, and the fish caught during the study period were substantially smaller than fish caught during that same time frame in previous years. Thus, they argued, the study was not able to confirm that larger bigeye tuna could be retained on the 4.0 mm (0.157 in) wire diameter hooks. Follow-up analysis by Bigelow (2012) confirmed the seasonality effect of size and value of bigeye tuna in the fishery. Based on these findings, NMFS does not have sufficient data to determine whether the proposed weak hooks would have a significant impact on target catch throughout the year.

Second, NMFS received new information during the public comment period that indicates that the use of 4.5 mm (0.177 in) wire diameter circle hooks in the deep-set fishery is not as widespread as was first believed during the development of the Team’s recommendations and NMFS’ proposed FKWTRP, and therefore is not representative of an industry “standard.” NMFS confirmed this information by contacting major hook suppliers for the deep-set fishery. Information was obtained for approximately 80 percent of the vessels in the deep-set fishery. Only an estimated 20 percent of those vessels are believed to be using size 15/0 or smaller circle hooks with wire diameter of 4.5 mm (0.177 in) or less; the remaining 80 percent are believed to be using circle hooks with a larger wire diameter (e.g., size 16/0 circle hooks with 4.7 mm (0.185 in) or 5.0 mm (0.197 in) wire.
Accordingly, NMFS is not requiring that the gear be assembled and maintained such that the hook is the tackle. It is expected that this regulation will reduce the number of false killer whale serious injuries.

This regulation is added to the take reduction plans at 50 CFR Part 229, rather than 50 CFR 665.813 as proposed. NMFS has consolidated all FKWTRP regulations in 50 CFR part 229 to more clearly reflect the authority under which the regulations have been promulgated.

3. Main Hawaiian Islands Longline Fishing Prohibited Area

An existing longline exclusion zone prohibits longline fishing year-round around the MHI (50 CFR 665.806(a)(2)). The exclusion zone was created in 1992 to prevent gear conflicts between longline fisheries and pelagic troll and handline fisheries (57 FR 7661, March 2, 1992). The outer extent of the boundary changes seasonally to allow longline fishing to occur closer to the windward shores of the MHI between October and January (WPRFMC, 2009). This seasonally open area covers 71,384 km² (20,812 nmi²).

The seasonally open area is within the area of overlap between the Hawaii Insular and Hawaii Pelagic stocks of false killer whales as defined in the draft 2012 SAR (Carretta et al., 2012a), and incidental M&SI of false killer whales and blackfish in the longline fisheries has been documented there. Given that longline fishing in this area may impact both false killer whale stocks, the Team recommended that NMFS designate the seasonally open area as a “Northern Exclusion Zone” (NEZ), and close it to commercial longline fishing year-round. Such a closure would effectively maintain the current boundary of the February-September longline exclusion zone prohibitions throughout the entire year.

NMFS proposed to implement the Team’s recommendation by revising the existing longline exclusion zone regulations to eliminate the seasonal change in the boundary, rather than establishing a separate NEZ closure area. NMFS received public comments on this proposed change, including: (a) Confusion over the legal authority used to make the change (i.e., MSA vs. MMPA); (b) concern that the different regulatory purposes of the original closure (gear conflict) and the proposed closure (false killer whale conservation) are not clear; and (c) concern that including the closure only in 50 CFR part 665 and not in FKWTRP regulations at 50 CFR part 229 could allow future changes to the closure for fishery management purposes that would obviate the risk reduction necessary for false killer whales. See comments/responses 3–5 and 38–41.
In this final rule NMFS is establishing a Main Hawaiian Islands Longline Fishing Prohibited area (Figure 1) in FKWTRP regulations at 50 CFR part 229, bounded by the same coordinates as the existing February-September longline exclusion zone. Longline fishing within this area is prohibited year-round. This regulation makes it clear that the entire Longline Fishing Prohibited Area around the MHI, not just the seasonally open area to the north of the MHI, is important for false killer whale conservation. It is anticipated that this closure will substantially reduce the risk that the deep- and shallow-set longline fisheries pose to the Hawaii Insular stock of false killer whales, because longline fishing is now prohibited from the Hawaii Insular stock’s entire “core” range and a large portion of the stock’s “extended” range. It is also expected to eliminate incidental M&SI of the Hawaii Pelagic stock of false killer whales by longline fisheries in that area.

As previously indicated, the MHI Longline Fishing Prohibited Area was established in 50 CFR 665.806(a) under MSA authority. NMFS is using its authority under MSA section 305(d) to revise the existing regulations in 50 CFR 665.806(a)(2) for the MHI Longline Fishing Prohibited Area to eliminate the seasonal boundary change. This action is necessary to ensure that fisheries management regulations remain consistent with all applicable laws and regulations, including MMPA and the FKWTRP regulations.

Figure 1. Main Hawaiian Islands Longline Fishing Prohibited Area and Southern Exclusion Zone. Inflection points are lettered as per the final regulations.

The Team recommended that NMFS develop and implement a mandatory, annual certification program to educate owners and operators of Hawaii-based longline vessels about ways to reduce incidental M&SI of marine mammals. The Team that believes specific training would significantly increase the potential for captains and crew to free hooked or entangled false killer whales from gear in a manner that would reduce the severity of the injury (FKWTRT 2010). The Team recommended that NMFS expand the existing Protected Species Workshops, required under 50 CFR 665.814, to incorporate additional information regarding marine mammal interactions.

NMFS is implementing the Team’s recommendation, as proposed. Under existing regulations for western Pacific pelagic fisheries (50 CFR 665.814,
Protected Species Workshop), owners and operators of all western Pacific pelagic longline vessels must successfully complete a workshop each year, and a valid workshop certificate is needed for owners to maintain or renew permits and for operators at sea. Sea turtle and seabird handling is specified in these regulations; there is no regulatory requirement for training in marine mammal handling. However, since 2004, NMFS has incorporated training on marine mammal identification, careful handling and release techniques, and an overview, as well as an explanation, of the purpose and justification for marine mammal bycatch reporting requirements that apply to the longline fisheries into these workshops. NMFS has expanded the content of the in-person workshops in consultation with the Team, and will continue to update the content as appropriate to meet the needs of the FKWTTRP. The online version of the workshop will be revised to include the updated marine mammal content as soon as possible.

To ensure that the marine mammal component is maintained by regulation as part of the workshops, NMFS is adding the requirement for certification to the take reduction plan regulations at 50 CFR part 229, under MMPA authority.

5. Marine Mammal Handling and Release Guidelines Posting Requirement

The Team recommended, and NMFS is requiring, that all longline vessels in the Hawaii-based fleet must post a NMFS-approved marine mammal handling and release informational placard onboard in a location where it would be visible to the captain and crew. NMFS believes this action will facilitate the careful handling and release of marine mammals incidentally hooked or entangled during longline fishing, including false killer whales, other small cetaceans, and large whales. This requirement is specified in the take reduction plan regulations at 50 CFR part 229.

6. Requirement for Captains’ Supervision of Marine Mammal Interactions

As noted above (see “4. Required Annual Certification in Marine Mammal Interaction Mitigation”), longline vessel captains are required to attend and be certified annually in protected species interaction mitigation techniques (50 CFR 665.814). NMFS has expanded the content of these workshops to include more specific training in marine mammal handling and release. Vessel crew members are not required to receive certification. Therefore, the captain may be the only person on the vessel trained in marine mammal handling and release protocols, particularly on trips without an observer. However, the Team noted that captains may not always be on deck while the gear is being hauled and thus may not observe or be aware of marine mammal hooking or entanglement events. The Team recommended, and NMFS is requiring, that the captain of each longline vessel supervise the handling and release of any hooked or entangled marine mammal. The captain does not necessarily need to be on deck, but could, for example, oversee and direct specific actions from the wheelhouse, so long as the captain at all times maintains effective communications with and oversight of the crew. This requirement is specified in the take reduction plan regulations at 50 CFR part 229.

7. Captain Notification Placard Posting Requirement

At the Team’s recommendation, NMFS developed a placard that instructs the vessel crew to notify the captain immediately if a marine mammal is hooked or entangled. The Team recommended, and NMFS is requiring, that all longline vessels in the Hawaii-based fleet must post this NMFS-approved placard onboard in a location where it would be visible to the crew. It is expected that this measure will facilitate crew notification of the captain, thereby ensuring the captain is aware of any marine mammal interactions and supervises the handling and release, as required above in “6. Requirement for Captains’ Supervision of Marine Mammal Interactions”. This requirement is specified in the take reduction plan regulations at 50 CFR part 229.

8. Southern Exclusion Zone Closure

In this final rule, NMFS is establishing a “Southern Exclusion Zone” (SEZ) that will be closed to deep-set longline fishing upon reaching a specified threshold level (or “trigger”) of observed false killer whale mortalities or serious injuries inside the U.S. EEZ around Hawaii; or (2) the number of observed false killer whale serious injuries or mortalities inside the U.S. EEZ around Hawaii that, when extrapolated based on the percentage observer coverage for that year, is greater than PBR (FKWTTRT, 2010). The triggers were designed to be flexible to allow changing PBR once population estimates became available and if there were future changes to PBR. NMFS considered the Team’s recommended minimum trigger of two observed M&SI, and was concerned that it may not achieve adequate reductions in M&SI, as required under MMPA section 118. The recommended minimum trigger of two observed M&SI (which roughly extrapolates to 10 M&SI fleet-wide per year with 20 percent observer coverage) would have allowed PBR (2.5 at the time the Draft FKWTTRT was developed and the proposed FKWTTRT was published), to be exceeded by a factor of four before a consequence closure of the SEZ. This was not consistent with MMPA section 118 requirements that the Plan should be effective in reducing M&SI to below PBR, and eventually to insignificant levels, even when considered together with other measures in the Plan.

In the proposed rule, NMFS proposed modifications to the Team’s recommended SEZ to address the issue of PBR exceedance. We recognized that, given the PBR of 2.5, even a single
observed mortality or serious injury in a year (which extrapolates to 5 M&SI at 20 percent observer coverage) would be double the PBR value. Therefore, we proposed to manage M&SI across a longer time frame. We calculated that allowable level of M&SI across five years (i.e., five times PBR), converted this number to allowable observed M&SI across five years (by multiplying by the observer coverage level), and rounded down to the nearest whole number. We proposed this value as an “initial” trigger, thereby “front-loading” five years’ worth of M&SI into a single year. If the initial trigger was met within a given year, the SEZ would be closed for the remainder of the year. Then, if a single additional mortality or serious injury was observed in any of the following four years of that five-year timeframe, the 5-year PBR would be exceeded, so the SEZ would again be closed, until reopened by NMFS.

Public comments raised several issues with the proposed SEZ trigger. The primary concern was that levels of M&SI below the “initial” trigger level could exceed PBR, in single years but particularly across consecutive years, without triggering closure of the SEZ. Commenters also noted that the “initial” trigger is based on the PBR value at the time the trigger was set, but the trigger for the subsequent four years of the five-year timeframe (1 observed mortality or serious injury) cannot be changed even if PBR were to change during those four years.

In developing this final rule, NMFS considered the trigger for modifying the SEZ measures to address issues raised in public comments. As part of this process, NMFS reevaluated the Team’s recommended trigger, particularly in light of the new PBR of 9.1 for the Hawaii Pelagic stock, as calculated in the draft 2012 SAR (Carretta et al., 2012a). We note that our initial concerns regarding the Team’s minimum trigger have been addressed by the larger PBR value. That is, the Team’s recommended minimum trigger of two observed M&SI (which extrapolates to an estimated 10 M&SI fleet-wide based on 20 percent observer coverage) would result in closure of the SEZ immediately after the observed mortality or serious injury that caused PBR to be exceeded. NMFS considers this an appropriate consequence for exceeding PBR and preventing further PBR exceedance.

In this final rule, NMFS is implementing an SEZ measure that more closely conforms to the Team’s consensus recommendations described in the Draft FKWTRP (FKWTRT, 2010). In doing so, we remain concerned that the Team’s recommendation might not adequately protect false killer whales under all factual scenarios if PBR were to be lower, for reasons explained above (i.e., the minimum trigger of two observed M&SI was too large, and would have allowed potentially high levels of PBR exceedance without a consequence closure of the SEZ). A reduced PBR for the Hawaii Pelagic stock is possible in the future, particularly to account for the survey’s vessel attraction effect, as more fully discussed in the draft 2012 SAR (Carretta et al., 2012a). Accordingly, NMFS will continue to evaluate and consult with the Team on refinements to the SEZ trigger/closure that help respond to potential changes in PBR. If future refinements are necessary, they will be implemented by appropriate rulemaking.

The following paragraphs describe the trigger value in years in which the SEZ was not effective in previous year.

a. Defining the trigger. The trigger is defined as the larger of these two values: (i) two observed M&SI of false killer whales by the deep-set fishery within the U.S. EEZ around Hawaii; or (ii) the smallest number of observed M&SI of false killer whales by the deep-set fishery within the U.S. EEZ around Hawaii that, when extrapolated based on the percentage observer coverage for that year, exceeds PBR. This trigger accounts for possible changes in observer coverage and PBR in future years under the FKWTRP. Therefore, under the first threshold, the minimum trigger is two. For the second threshold to be applicable (i.e., a trigger larger than two), PBR would need to be 10 or greater, given current levels of observer coverage (20 percent). If PBR were less than 10, two observed M&SI, when extrapolated based on observer coverage (10 animals), would exceed PBR. Since M&SI cannot exceed PBR, under this example the trigger would remain at two under the first threshold. If, on the other hand, PBR was determined to be 10 or greater, two observed M&SI, when extrapolated (10 animals based on observer coverage), would be less than or equal to PBR, so the trigger could be increased until M&SI exceeds PBR.

NMFS is specifying the trigger definition in the FKWTRP regulations and establishing the trigger value for this first year of implementation as two observed false killer whale mortalities or serious injuries by the deep-set longline fishery within the U.S. EEZ around Hawaii. This trigger value (two) will remain valid until NMFS publishes a new trigger value in the Federal Register. For example, if observer coverage in the deep-set fishery or PBR for the Hawaii Pelagic stock changes substantially enough to increase the trigger value (calculated as outlined in the paragraph above), NMFS would publish a new trigger value in a Federal Register notice.

There are three important considerations regarding the trigger calculations. First, the extrapolated estimates of false killer whale M&SI described in this section are calculated for purposes of implementing the SEZ only, and do not represent the official bycatch estimates for false killer whales in the fishery. The official bycatch estimates are calculated by separate methods and are presented in the annual SARs. Second, as the Team recommended and NMFS proposed, the trigger applies only to the Hawaii Pelagic stock of false killer whales given the stock’s strategic status and the location of the closure. Although the Hawaii Insular stock is also strategic, closure of the SEZ would have very little effect on the stock because the SEZ is almost entirely outside the Hawaii Insular stock’s range. For the purposes of implementing SEZ measures, any false killer whale incidentally taken inside the U.S. EEZ around Hawaii is assumed to be part of the Hawaii Pelagic stock, unless the animal could be positively identified as belonging to the Hawaii Insular stock through photoidentification or genetic analysis of a tissue sample. This is true even if false killer whales taken in the Hawaii Pelagic/Insular stock overlap zone. Those animals would be prorated for assignment to the stocks in the official bycatch estimates, but for purposes of implementing the SEZ, the animals cannot be prorated. Third, only observed serious injuries or mortalities would be counted toward the trigger, while injuries determined to be non-serious would not. An expedited process for serious injury determinations is described below (see “3. Expedite False Killer Whale Serious Injury Determinations” under “Non-Regulatory Measures”).

b. Procedures when no SEZ closure effective in previous year. For the first year of FKWTRP implementation, and in years in which the SEZ was not closed in the previous year, the following three steps i. through iii. will be applied for the current year:

i. M&SI below the trigger. After each false killer whale mortality or serious
injury in the deep-set longline fishery inside the U.S. EEZ around Hawaii that is below the established trigger in a given fishing year, NMFS will notify the Team. Following the last mortality or serious injury before the trigger is met, NMFS will also convene the Team by teleconference after the second observed mortality or serious injury.

ii. M&SI that meets the trigger. If there is an observed false killer whale mortality or serious injury in the deep-set longline fishery inside the U.S. EEZ around Hawaii that meets the established trigger for a given fishing year, NMFS will close the SEZ until the end of that calendar year, and then convene the Team for a meeting. NMFS would reopen the SEZ at the beginning of the next calendar year. The availability of funding may limit NMFS' ability to convene the Team for an in-person meeting; however, NMFS would convene the Team by teleconference or other efficient means until funding becomes available for an in-person meeting. Regardless of whether NMFS has convened an in-person Team meeting, NMFS would reopen the SEZ at the beginning of the next year.

If a closure of the SEZ is triggered, NMFS will notify the fishery and close the area for the specified time period (the rest of the calendar year) through a Federal Register notice. The notice will announce that the fishery will be closed beginning at a specified date, which is not earlier than 7 days and not later than 15 days, after the date of filing the closure notice for public inspection at the Office of the Federal Register. The notice will include the specifics of the closure, as well as when and how the SEZ would be reopened.

iii. M&SI after the SEZ is closed. Additional mortalities or serious injuries of false killer whales in the deep-set longline fishery in the U.S. EEZ after the SEZ is closed may warrant review of FKWTTRP implementation or effectiveness. Therefore, if during the same calendar year following closure of the SEZ, there is an observed false killer whale mortality or serious injury on a deep-set longline trip anywhere in the U.S. EEZ around Hawaii, then NMFS would again convene the Team to discuss the circumstances of the event and consider the effectiveness of the SEZ closure and overall FKWTTRP. The Team may be convened by teleconference or other efficient means.

c. Procedures when SEZ was closed during the previous year. If the SEZ was closed for any part of the previous year as per step b., the following procedures i. and ii. apply for the current year:

i. M&SI below the trigger. Consistent with the procedures in step b. above, after each false killer whale mortality or serious injury in the deep-set longline fishery inside the U.S. EEZ around Hawaii that is below the established trigger in a given fishing year, NMFS will notify the Team. Following the last mortality or serious injury before the trigger is met, NMFS will also convene the Team by teleconference to discuss the circumstances of the event. For example, if the trigger were three, NMFS would notify the Team of the first mortality or serious injury, and would convene the Team by teleconference after the second observed mortality or serious injury.

ii. M&SI that meets the trigger. If there is an observed false killer whale mortality or serious injury in the deep-set longline fishery inside the U.S. EEZ around Hawaii that meets the established trigger for a given fishing year, NMFS will close the SEZ until the end of that calendar year, and then convene the Team for a meeting. NMFS would reopen the SEZ at the beginning of the next year.

If a closure of the SEZ is triggered, NMFS will notify the fishery and close the area for the specified time period (the rest of the calendar year) through a Federal Register notice. The notice will announce that the fishery will be closed beginning at a specified date, which is not earlier than 7 days and not later than 15 days, after the date of filing the closure notice for public inspection at the Office of the Federal Register. The notice will include the specifics of the closure, as well as when and how the SEZ would be reopened.

iii. M&SI after the SEZ is closed. Additional mortalities or serious injuries of false killer whales in the deep-set longline fishery in the U.S. EEZ after the SEZ is closed may warrant review of FKWTTRP implementation or effectiveness. Therefore, if during the same calendar year following closure of the SEZ, there is an observed false killer whale mortality or serious injury on a deep-set longline trip anywhere in the U.S. EEZ around Hawaii, then NMFS would again convene the Team to discuss the circumstances of the event and consider the effectiveness of the SEZ closure and overall FKWTTRP. The Team may be convened by teleconference or other efficient means.
4. Make specific changes to the observer training and data collection protocols;
5. Expedite processing the 2010 HICEAS II survey data and provide preliminary results to the Team; and
6. Reconvene the Team at regular intervals.

Though these measures are part of the FKWTNP, they do not place requirements on the longline fisheries and are not being implemented through regulations. These non-regulatory measures are more fully described below.

1. Increase Precision of Bycatch Estimates

NMFS currently requires that observer coverage in the deep-set longline fishery be maintained at an annual level of at least 20 percent, as per the Terms and Conditions of the October 4, 2005 Endangered Species Act Biological Opinion on the deep-set longline fishery (NMFS, 2005b). The Team recommended that NMFS increase observer coverage in the deep-set longline fishery to at least a 25 percent average quarterly coverage rate, provided the increase is funded by the Federal government. Following submission of the Team’s recommendations, NMFS conducted an analysis to determine the potential benefit of such an overall increase in observer coverage, in terms of how that coverage increase would increase the precision (i.e., decrease the error) of the bycatch estimate in the fishery. The analysis also evaluated the benefit of that error reduction compared to the cost of the observer coverage increase (McCracken and Boggs, 2010). This analysis found diminishing improvement in the precision of the bycatch estimate when moving from 20 to 25 percent overall coverage. NMFS does not believe any incremental improvement in data precision justifies an increase to 25 percent coverage, given limitations on personnel and resources. Therefore, NMFS is not increasing overall observer coverage in the fishery, but may consider changes in future coverage if circumstances warrant.

However, NMFS intends to implement an increase in systematic observer coverage in the deep-set longline fishery (see the proposed rule for a description of the Observer Program’s sampling schemes, including systematic and day sampling; 76 FR 42082, July 18, 2011). This is based on the findings that ensuring systematic coverage is at a minimum of 15 percent year-round provides a greater benefit in relation to error reduction than a 25 percent of 20 percent, or an overall sample increase from 20 percent to 25 percent (McCracken and Boggs, 2010). Day sampling will continue to be used to meet the additional minimum of 5 percent to attain the targeted 20 percent coverage for the deep-set longline fishery. NMFS is working with the observer contractor to reallocate observers and schedule observer trainings appropriately to ensure enough observers are available to meet the new sampling targets for the deep-set longline fishery. NMFS has already begun to implement these changes. Future changes to observer coverage remain subject to the availability of appropriations, and NMFS may reallocate observer coverage at any time based on operational requirements.

2. Notify the Team of Observed Interactions

The Team requested that NMFS notify the Team when there is an observed interaction of a blackfish or possible false killer whale, and provide the Team with any non-confidential information regarding the interaction. Some of this information is currently available through PIROP’s quarterly and annual reports, and non-confidential details on each interaction are available in annual reports documenting serious injury determinations. Because this information may be useful for the Team as it considers the success of the management measures and considers amendments, NMFS will expedite the internal processing and approval of observer data on the trips where false killer whales or possible false killer whales were injured or killed, and provide any non-confidential information to the Team members for their consideration as soon as practical after the event. NMFS has already begun to implement these changes.

3. Expedite False Killer Whale Serious Injury Determinations

For purposes of implementing the FKWTNP, NMFS will expedite serious injury determinations for false killer whales, as recommended by the Team. In January 2012, NMFS finalized a national policy for distinguishing serious from non-serious injury to marine mammals. The policy describes a general annual process for making and documenting injury determinations, and includes seven steps: (1) Initial injury determination, (2) Determination Staff Working Group (comprising NMFS Science Center staff) information exchange, (3) NMFS Regional Office review, (4) report preparation, (5) NMFS Scientific Review Group review, (6) report clearance (within each Science Center), and (7) inclusion of injury determinations in the annual SAR and marine mammal conservation management regimes (NMFS, 2012). This process is fairly slow, and an expedited process is necessary to provide final serious injury determinations closer to real-time to determine whether the trigger for closing the SEZ has been met. The expedited process will also assist the Team in monitoring the success of the FKWTNP in meeting its short-term goal.

NMFS will continue to implement the NMFS policy and process for serious injury determinations for all marine mammal interactions on an annual basis, but for false killer whale interactions, NMFS will complete the following additional expedited process on a case-by-case basis:

a. PIROP will prioritize the processing of trips with false killer whale, blackfish, or unidentified cetacean interactions assuming any possibility of being a false killer whale. PIROP will debrief the observer and approve the marine mammal portions of the data as quickly as possible following return of the vessel to port.

b. PIROP will send the approved data to the NMFS Pacific Islands Fisheries Science Center (PIFSC) staff member who makes the marine mammal serious injury determinations (i.e., “determination staff”), or his/her trained backup. The PIFSC determination staff will then transmit the data to determination staff at the NMFS Southwest and Southeast Fisheries Science Centers (SWFSC and SEFSC) who are familiar with small cetacean injuries in longline fisheries.

d. Determination staff of the three Science Centers will conduct independent review of the data according to the criteria in NMFS’ Serious Injury policy, and make preliminary injury determinations. The staff will discuss these determinations and resolve any discrepancies.

e. The PIFSC determination staff will send the determination, supporting data, and the rationale to the Pacific Scientific Review Group (PSRG) and for review and concurrence. PIFSC will also provide the information to the Team coordinator in the NMFS Pacific Islands Regional Office (PIRO) Protected Resources Division (PRD), or a designated backup who is familiar with the Serious Injury policy and criteria, for review.

f. The PIRO determination staff will consider PSRG feedback, and make the final injury determination.

After these steps are completed, the injury determinations for these cases
will be considered final and will be used for purposes of implementing and monitoring the FKWTRP. These injury determinations will also be considered final for use in the SAR and developing bycatch estimates.

4. Changes to Observer Data Collection Protocol and Training

In its deliberations, the Team relied heavily on analyses of observer program data. The Team noted that specific information that is not currently collected would be useful to support future Team deliberations and to further understand and identify patterns of marine mammal bycatch. The Team recommended that NMFS modify the observer data forms to collect additional information, and also recommended changes to observer training and observer protocol during and after marine mammal interactions. NMFS is implementing the recommended changes, as possible, through appropriate changes to the data collection forms, observer protocol, and/or observer training, but notes that some of the recommendations are already being implemented through existing data forms, protocol, and training, as described in the proposed rule.

5. Hawaiian Islands Cetacean and Ecosystem Assessment Survey 2010 Data

NMFS conducted a cetacean assessment survey in the U.S. EEZ around Hawaii (Hawaiian Islands Cetacean and Ecosystem Assessment Survey, or HICEAS 2010) from August–December 2010. The survey was a collaborative effort between the NMFS PIFSC and NMFS SWFSC, and involved 175 days at sea on two NOAA research vessels. The Team recommended that NMFS expedite the processing of the survey data and provide preliminary results to the Team once the PSRG has completed its review. The Team also recommended that the PSRG complete its review as expeditiously as possible.

NMFS has completed an initial analysis of the HICEAS 2010 data (Bradford et al., 2012) and incorporated the resulting false killer whale abundance analysis into the draft 2012 SAR. NMFS has shared these results with the Team. It is anticipated that updated abundance estimates for all remaining Hawaiian cetaceans will be available in the draft 2013 SARs. NMFS will share information on these updated analyses with the Team as it becomes available.

6. Reconvene Team at Regular Intervals

The Team recommended that NMFS should reconvene the Team every six months for at least two years following implementation of the FKWTRP, and at appropriate intervals thereafter to continue to monitor the progress of the FKWTRP in reaching its short- and long-term goals, and discuss amending the FKWTRP if necessary. The availability of funding may limit the frequency with which NMFS can reconvene the Team for in-person meetings. Therefore, NMFS will reconvene the Team at regular intervals for in-person meetings and/or teleconferences, depending on available funding.

Additional Research and Data Collection

The Team developed a list of 35 research recommendations, which were prioritized within and across four categories: False killer whale biology; longline gear and fishing; shortline and kaka line fishing; and false killer whale assessment. The Team also listed five additional research topics that were not included in the ranked list. Details of all of the recommended research topics can be found in Chapter 9 of the Draft FKWTRP (FKWTRT 2010). The Team noted the iterative process inherent in research and the need to maintain the list of research priorities as a “living document,” with changes and additions anticipated over the course of the take reduction process.

NMFS will pursue the additional research and data collection goals outlined by the Team, within the constraints of available funding. Further, NMFS will consider the Team’s recommendations for additional research and data collection when establishing NMFS’ funding priorities. NMFS will follow the recommendations to the extent that good scientific practice and resources allow. As feasible and appropriate, NMFS will consult and coordinate with the Team during this process.

Monitoring and Measures of Success

The short-term and long-term goals of the FKWTRP are described above (“Goals of the FKWTRP”), and are defined to meet the MMPA requirements for reducing incidental false killer whale incidental M&SI. The Team recognized that there may be other measures of success of the FKWTRP, and identified measures of progress or success for various components of the Draft FKWTRP. For example, measures include fully implementing circle hooks in the deep-set longline fishery; achieving zero false killer whale incidental M&SI in two years within the U.S. EEZ and Hawaii; achieving a reduction of false killer whale incidental M&SI consistent with the percentage needed to move below PBR within the U.S. EEZ around Hawaii; reducing the false killer whale incidental M&SI rate; and making progress in each of the four identified research categories. NMFS, in consultation with the Team, is developing a plan for monitoring the effectiveness of the FKWTRP that incorporates many of these measures of success.

Comments on the Notice of Proposed Rulemaking and Responses

NMFS received 86 comments on the proposed rule from the State of Hawaii’s fishery management agency (Department of Land and Natural Resources (DLNR)), the Marine Mammal Commission (MMC), the Western Pacific Fishery Management Council (Council), environmental organizations, commercial fishing organizations, commercial fishermen, and interested members of the public. Of those, 68 were identical, or slightly modified, form letters expressing support for the proposed rule, and 18 contained substantive comments on specific measures or components of the proposed rule. In the text below, NMFS provides a summary of the significant comments, recommendations, and issues raised that relate to this rulemaking, provides responses to them, and identifies any changes to the proposed regulations. Comments related to the draft Environmental Assessment, Regulatory Impact Review, and Initial Regulatory Flexibility Analysis are summarized and included in the final EA/RIR/FRFA that can be found on the Team Web site (http://www.nmfs.noaa.gov/pr/interactions/trt/falsekillerwhale.htm), and is available upon request from the Regulatory Branch Chief [see ADDRESSES].

General

Comment 1: Numerous commenters (The Humane Society of the U.S. (HSUS), MMC, Earthjustice, Turtle Island Restoration Network (TIRN), and individuals) expressed general support for the FKWTRP, though some commenters noted their support was conditioned by specific changes, clarifications, and/or cautions (discussed in comments below). Commenters noted the protections for false killer whales were long overdue, and recommended immediate implementation of all new protections.

Response: NMFS acknowledges these comments. The FKWTRP is necessary to reduce levels of incidental false killer whale mortality and injury in the Hawaii-based longline fisheries, as required by the MMPA.
Comment 2: Several commenters addressed the differences between the Draft FKWTRP (the Team’s recommendations) and NMFS’ proposed FKWTRP. The Hawaii Longline Association (HLA), the Council, and individual commenters did not support the changes from the Draft FKWTRP to the proposed FKWTRP, and argued that the changes undermined the TRT process and the agreement reached by the Team in July 2010. The Council believes sufficient justification could be offered to support the TRT’s consensus plan, rather than diverge from it. Conversely, HSUS and MMC commented that the proposed FKWTRP is largely based on the Team’s deliberations and recommendations, and while some provisions differ from the Team’s recommendations, HSUS and MMC believe the rationale for most of the changes seem reasonable.

Response: NMFS values the work of the Team in providing consensus recommendations for reducing false killer whale &SI in the longline fisheries. NMFS’ proposed FKWTRP included nearly all of the Team’s consensus recommendations, with some important modifications. In the proposed rule, NMFS described and provided specific rationale for all changes from the Team’s recommendations, as required by the MMPA. For discussion of changes from the proposed rule, see the “Changes from the Proposed Rule” section below, and responses to comments throughout this rulemaking.

Comment 3: MMC commented that the rationale for and implications of not including all proposed FKWTRP regulatory measures together under 50 CFR part 229 are not clear, and noted that this bifurcated rulemaking approach will result in confusion regarding authorities and potential conflicts between the two parts of the regulations. HSUS and MMC recommended that NMFS should either include all FKWTRP regulations under MMPA authority in 50 CFR Part 229, or if they are adopted under MSA authority in 50 CFR part 665, that there be sufficient cross-referencing or independent language such that a change under a fishery management plan will not result in obviating the risk reduction that is needed for false killer whales under the MMPA. In the latter case, MMC recommended language in the final rule specifying that any changes to FKWTRP measures under 50 CFR part 665 follow the same procedures as those required to change FKWTRP measures in 50 CFR part 229, including advance review and consultation with the Team.

Response: NMFS acknowledges that the proposed codification of the FKWTRP regulations has caused unintended confusion. All FKWTRP regulations in 50 CFR Part 229 are issued under MMPA authority. Accordingly, in this final rule, NMFS is codifying all FKWTRP regulations under 50 CFR part 229 to more clearly reflect the authority under which the regulations have been promulgated. In addition, under MSA section 305(d) authority, NMFS has revised the existing regulations in 50 CFR 665.806(a)(2) defining the MHI longline fishing prohibited area so that the boundaries are consistent with the prohibited area required under the FKWTRP.

Comment 4: HLA and the Council commented that the proposed rule does not comply with MSA. They argue that NMFS proposed to amend the current MSA regulations governing the fisheries to implement the proposed FKWTRP’s gear requirements and MHI longline fishing prohibited area; however, the rule does not specify whether and how NMFS plans to comply with the MSA statutory provisions and regulations that govern the promulgation of fishery management regulations.

Response: NMFS disagrees with this comment. In this final rule, NMFS issues all take reduction plan regulations under MMPA authority. Specifically, MMPA section 118 requires NMFS to develop and implement a take reduction plan containing conservation measures designed to assist in the recovery or prevent the depletion of strategic stocks that interact with a commercial fishery. Where a stock’s incidental &SI exceeds PBR, section 118 requires that the TRP include measures that NMFS expects will reduce, within 6 months of the plan’s implementation, &SI to a level below PBR. Although in meeting the long-term goals of the TRP, NMFS is authorized to “take into account” the economics of the fishery, the availability of existing technology, and existing State or fishery management plans, nothing in MMPA requires NMFS when implementing these TRP regulations to follow MSA procedures or MSA requirements for implementing fishery management plans and plan amendments. However, as indicated above, NMFS has revised the boundaries of the existing longline prohibited area around the main Hawaiian Islands, as defined in 50 CFR 665.806(a)(2), to conform to the prohibited area established under the FKWTRP regulations. This action is taken under NMFS’ MSA section 305(d) authority, and is necessary to ensure that existing regulations applicable to the management of the longline fishery remain consistent with all applicable law, including the requirements of the MMPA and this FKWTRP.

Comment 5: The Council questioned whether the addition of new regulatory measures under 50 CFR part 665 as a result of FKWTRP implementation results in inconsistency between the fishing regulations and the Fishery Ecosystem Plan (FEP) for Pacific Pelagic Fisheries of the Western Pacific Region, and whether the FEP will require an amendment to resolve the inconsistency. The Council requested clear direction from NMFS, since an FEP amendment incurs administrative burden on Council resources.

Response: We agree with the Council that under the proposed rule, public confusion might result from the codification of FKWTRP regulations in 50 CFR part 665. Accordingly, the final rule clarifies that because all FKWTRP regulations are issued under MMPA authority, they are being codified in 50 CFR part 229. As indicated above, the existing fishing regulations in 50 CFR 665.806(a)(2), which establish an area that is open to longline fishing seasonally, are inconsistent with the FKWTRP’s designation of a year-round longline exclusion zone around the MHI. NMFS’ action to revise the boundaries in 50 CFR 665.806(a)(2) is necessary to resolve conflicting regulations and to ensure that the FEP is carried out consistent with all applicable law, including MMPA. However, authority to initiate a change to the MHI longline prohibited area boundary as described in the FEP resides with the Council.

Comment 6: Earthjustice commented that subsequent to publication of the proposed FKWTRP, NMFS amended 50 CFR 665.813 to add a new paragraph (k) that requires longline gear modifications in the South Pacific to reduce turtle interactions. Earthjustice stated that in promulgating the final FKWTRP regulations, NMFS should be careful to remember the false killer whale provisions accordingly.

Response: In this final rule, NMFS is placing all FKWTRP regulations in 50 CFR part 229, so 50 CFR 665.813 will be unaffected.

Comment 7: HLA and other individuals commented that the FKWTRP is not based on the best available information. These commenters discussed NMFS’ abundance estimate and PBR calculation for the Hawaii Pelagic stock of false killer whales, and their use as the basis for the FKWTRP. The commenters state that the abundance
estimate in the final 2010 SAR is outdated and has been shown to be inaccurate based on the sightings data from NMFS’ 2010 shipboard survey of the U.S. EEZ around Hawaii. The commenters argue that sightings data from that 2010 survey represent new “information” and are currently the best available science, regardless of whether a new abundance estimate has been calculated. The commenters state that the PBR should be considered unknown, as per NMFS’ GAMMS, until a new PBR is issued. Because of these concerns, the commenters argue that NMFS should not issue a final TRP rule that is based on a PBR that derives from a stale and inaccurate population estimate.

Response: When NMFS issued the proposed FKWTTRP, the final 2010 SAR was the best available information. The final 2010 SAR reported abundance estimates and PBR calculations based on NMFS’ 2002 shipboard line-transect survey. All Team members were advised of the on-board survey, and of preliminary data indicating that abundance estimates for the Hawaii Pelagic stock of false killer whales would likely increase some amount. Much of the information from the 2010 shipboard line-transect survey has been analyzed and incorporated into the draft 2012 SAR, including updated abundance estimates and PBR calculations. NMFS is incorporating information in the draft 2012 SAR for consideration in this final FKWTTRP, along with other relevant information.

Comment 8: HLA commented that the FKWTTRP cannot create requirements with respect to high seas false killer whale interactions. HLA argues that authority extends only to the area for which NMFS has defined and calculated a PBR (here, the U.S. EEZ), and the success of the TRP must be measured by the applicable PBR and corresponding interactions that occur within the range covered by the PBR (i.e., within the U.S. EEZ). HLA states that whether interactions increase or decrease on the high seas has no bearing on whether the U.S. EEZ PBR is being exceeded.

Response: NMFS disagrees. MMPA section 102(a) broadly prohibits the taking of any marine mammal on the high seas by a person or vessel subject to the jurisdiction of the United States, unless such taking is otherwise authorized under MMPA. MMPA section 118 provides an exception to the section 102(a) prohibition by authorizing marine mammal takes incidental to commercial fishing. Specifically, Section 118(c)(3)(D) provides that where an owner or master holds a valid marine mammal authorization issued under the authority of this section, and operates a fishing vessel in accordance with the requirements of Section 118, the owner, master, and crew shall be not be liable for incidental takes of marine mammals while engaged in fishing operations under that authorization. Nothing in MMPA suggests that the requirements and immunities provided for in section 118 should not apply simply because PBR does not exist for the high seas component of a marine mammal stock. Otherwise, incidental take by commercial fishers on the high seas would be illegal.

Although PBR is currently only calculated for the portion of the Hawaii Pelagic stock residing within the U.S. EEZ around Hawaii, the SAR indicates that the stock is transboundary and its distribution is continuous across the U.S. EEZ boundary. False killer whales from the Hawaii Pelagic stock are seriously injured and killed on high seas waters adjacent to the U.S. EEZ. Accordingly, most of the FKWTTRP’s measures, including the gear and placard posting requirements, apply wherever a vessel operates, including the high seas. Managing serious interactions within the high seas portion of the Hawaii Pelagic false killer whale stock is essential to the successful implementation of the FKWTTRP, and the accomplishment of its conservation objectives under Section 118. The FKWTTRP’s objectives will not be satisfied if incidental M&SI in the longline fisheries is merely displaced to the high seas portion of the stock.

To ensure that conservation measures of the FKWTTRP would not simply displace fishing effort and its corresponding impacts on the Hawaii Pelagic false killer whale from the U.S. EEZ to the high seas, a goal of the FKWTTRP is that M&SI of the high seas portion of the Hawaii Pelagic stock does not increase above current levels (e.g., 11.2 false killer whales per year, as of the draft 2012 SAR (Carretta et al., 2012a). NMFS will continue to monitor false killer whale M&SI following implementation of the FKWTTRP. If implementation of the FKWTTRP measures results in an increase in false killer whale M&SI on the high seas, NMFS, in consultation with the Team, may consider amending the Plan to revise existing measures and/or require additional take reduction measures.

Comment 9: Earthjustice stated that the proposed FKWTTRP never seriously tackles the MMPA’s long-term goal of reducing incidental M&SI within five years of the Plan’s implementation to insignificant levels approaching a zero M&SI rate. Response: The FKWTTRP is based on the recommendations of the Team and contains measures to reduce the number and severity of incidental interactions between the longline fisheries and false killer whales. NMFS will continue to work with the Team as required by the MMPA and, in consultation with the Team, will monitor the FKWTTRP to determine whether it meets the MMPA’s short and long-term take reduction goals. We anticipate that this will involve a continuing process of Plan improvement and refinement as we continue to gain valuable information from the Plan’s implementation.

Comment 10: Londren-Pitman, Inc. commented that mortalities and “serious injuries” should not be lumped together, as “serious injury” is largely subjective and not quantifiable, regardless of the level of observer training.

Response: Under regulations and policies that implement MMPA, NMFS is required to consider both mortalities and serious injuries to marine mammals. The MMPA requires NMFS to distinguish between injuries to marine mammals that are serious and those that are non-serious. MMPA sections 117 and 118 specifically direct NMFS to consider both human-caused mortality and serious injury to marine mammals for stock assessments and management of fisheries interactions (e.g., classification on the MMPA List of Fisheries (LOF) and take reduction plans). In January 2012, NMFS issued a final national policy to establish a consistent and transparent process within NMFS for objectively distinguishing serious from non-serious injuries of marine mammals, for applying these criteria to injury cases, and for documenting injury determinations (77 FR 3233, January 23, 2012). The final policy interprets the regulatory definition of serious injury (“any injury that will likely result in mortality”, 50 CFR 229.2) as any injury that is “more likely than not” to result in mortality, or any injury that presents a greater than 50 percent chance of death to a marine mammal. Thus, mortalities and serious injuries are considered together when managing marine mammal interactions in commercial fisheries.

Comment 11: HLA objects to certain aspects of NMFS’ proposed formal guidance on serious injury determinations.

Response: NMFS’ national policy for distinguishing serious from non-serious injuries of marine mammals was finalized and has been in effect since
January 27, 2012, and is outside the scope of this rulemaking.

Comment 12: HLA and individual commenters do not support a serious injury determination process in which the determination is made by a single individual with “review” by the PSRG, particularly given the magnitude of the ramifications of a serious injury determination for the fisheries. These commenters recommend that the serious injury determinations for false killer whale interactions be made by a three-person panel composed of neutral representatives from NMFS PIRO’s PRD, the Council, and the NMFS PIFSC.

Response: The serious injury determination process has been formalized through a new national policy. Under the process prescribed in the new policy and the expedited version of that process described above (see “3. Expedite False Killer Whale Serious Injury Determinations” under “Non-Regulatory Measures”), initial serious injury determinations will be made by NMFS PIFSC staff person using the detailed criteria and procedures in the national policy. Each initial injury determination will then be reviewed three times: by a scientist in another NMFS Science Center who is familiar with small cetacean injuries in longline fisheries, by protected resources managers within the NMFS PIRO, and by the PSRG. The multiple levels of review will ensure consistent application of NMFS' serious injury criteria. NMFS believes this decision-making process is sufficiently thorough, while still efficient for purposes of implementing measures of the FKWTRP.

Comment 13: HSUS supports an expedited process for making serious injury determinations, but this should not come at the expense of a robust analysis by responsible scientists, nor should it create a short-changed internal review process.

Response: NMFS is implementing an expedited review process for making serious injury determinations for the purposes of the FKWTRP, as described above (see “3. Expedite False Killer Whale Serious Injury Determinations” under “Non-Regulatory Measures”). The process will allow NMFS to make the injury determinations in a timely fashion, as necessary for implementing provisions of an SEZ, while providing a structure for robust analysis and multiple levels of review.

Scope

Comment 14: HLA commented that the shallow-set longline fishery should not be included in the scope of the FKWTRP, arguing that false killer whale interactions with this fishery are both insignificant and discountable. HLA also noted that the fishery has 100 percent observer coverage, so there is a high degree of confidence in available information, and a ready and reliable source of ongoing information to alert NMFS should the situation change.

Response: The level of false killer whale M&SI in the Category II Hawaii-based shallow-set fishery is low, but there are documented M&SI of the strategic Hawaii Pelagic stock of false killer whales (0.1 average annual M&SI, as of the draft 2012 SAR (Carretta et al., 2012a)). Since the Category II shallow-set longline fishery interacts with the strategic Hawaii Pelagic stock, a take reduction plan is required as per MMPA section 118(f)(1).

Comment 15: Numerous commenters (HSUS, MMC, TIRN, Earthjustice, and individuals) commented that the FKWTRP should address all commercial fisheries known or suspected of interacting with false killer whales, and representatives of those fisheries should be added to the Team. Particular concern was expressed for nearshore fisheries, which may impact the Hawaii Insular stock. Earthjustice stated that this revision of the scope is needed to comply with the MMPA’s command that all commercial fisheries shall reduce incidental M&SI of marine mammals to insignificant levels approaching a zero M&SI rate.

Response: The FKWTRP addresses the commercial fisheries documented to have incidental M&SI of false killer whales—the Hawaii-based deep- and shallow-set longline fisheries. It is the long-term goal of this Plan to reduce the incidental M&SI to insignificant levels approaching a zero M&SI rate. As indicated in the Notice of Establishment of a False Killer Whale Take Reduction Team and Meeting (75 FR 2853, January 19, 2010), there is insufficient information to warrant including other commercial fisheries in the scope of the FKWTRP at this time. NMFS will revise the scope of the FKWTRP and add representatives of those commercial fisheries at a later date, if warranted.

Comment 16: HSUS and Earthjustice expressed particular concern regarding the Hawaii shortline fishery, and the potential that longline fishermen may switch to shortline fishing to avoid having to comply with regulations affecting the longline fisheries. HSUS commented that the potential conversion to shortline fishing could lead to higher rates of false killer whale mortality in a fishery that is poorly monitored and managed. Earthjustice notes the potential for considerable under-reporting of shortline fishing effort.

Response: As indicated in the Notice of Establishment of a False Killer Whale Take Reduction Team and Meeting (75 FR 2853, January 19, 2010), regulation of the shortline fishery is outside the scope of this rule. The shortline fishery is believed to operate with very few participants and with low levels of landings. Comprehensive federal management of the longline fisheries has not, to date, driven participants into shortlining, and NMFS has no reason to believe that future behavior will change. However, in recognition of the potential for longline fishermen to switch to shortline fishing, NMFS will work with Hawaii DLNR to monitor the reported shortline and mixed gear fishing effort, particularly during any closure of the SEZ.

Comment 17: Earthjustice recommended NMFS require shortline fishermen engaged in deep-setting to comply with the gear requirements of the FKWTRP (i.e., hook and branch line requirements).

Response: The shortline fishery is not regulated under this final FKWTRP. See response to comment 16 above.

Comment 18: HSUS, MMC, and Earthjustice stated that the shortline and kaka line fisheries must be monitored by independent observers so that operations and bycatch can be better understood and M&SI in those fisheries are accounted for.

Response: Individuals participating in a Category I or II fishery are required to accommodate an observer aboard their vessel(s) upon request from NMFS. Under the LOF, the shortline fishery is Category II, but the kaka line fishery is Category III. At this time, neither the shortline nor kaka line fishery is actively managed under a fishery management plan, and NMFS' observer program is fully committed to other fisheries. NMFS will continue to work with DLNR within available constraints and resources to improve data collection in these fisheries.

Comment 19: Hawaii DLNR is concerned that the Draft FKWTRP includes recommendations for further assessment of both shortline and kaka line fisheries. DLNR argues that kaka line fishing is not likely to interact with false killer whales, and NMFS should distinguish between the two gear types to prevent kaka line from unnecessarily being lumped in with other listed fisheries and having to comply with a stop fishing order when the false killer whale FPR limit is exceeded.

Response: Although the Team discussed and made recommendations regarding both shortline and kaka line
fisheries. NMFS recognizes that the fisheries may present different levels of risk of hooking and entanglement of false killer whales. The kaka line fishery was added to the LOF as a Category III fishery in the 2011 LOF, and its classification has not changed since it was originally listed. See the proposed (75 FR 36318, June 25, 2010) and final (75 FR 68468, November 8, 2010) 2011 LOF for more information.

The shortline and kaka line fisheries are not subject to the requirements of this final FKWTARP. The longline fishing prohibited area around the MHI does not apply to fisheries other than federally-permitted longline fisheries. Moreover, the SEZ closure, if closed based on exceedance of the trigger (which is based in part on PBR), would apply only to the federally-permitted deep-set longline fishery.

Comment 20: Hawaii DLNR urged NMFS to fully examine the shortline and kaka line fisheries and their impacts to false killer whales before moving to regulate them further.

Response: See our response to Comment 16 above. NMFS is not regulating the shortline fishery or kaka line fishery in this final FKWTARP. NMFS will work with Hawaii DLNR and the Team to gather and evaluate additional information on the impact, if any, of these other fisheries on marine mammals, and take appropriate action where warranted.

Comment 21: HLA argues that the Hawaii Insular stock of false killer whales should not be included in the scope of the FKWTARP. HLA states that the stock is not strategic. HLA states that there are no confirmed interactions between this stock and Hawaii’s longline fisheries, and HLA objects to the prorating of takes in areas that NMFS has identified as the Hawaii Insular stock’s range as arbitrary and unscientific. HLA argues that the stock does not qualify for a TRT/TRP process in its own right, nor is there a basis for including the stock due to ancillary interactions with a Category I fishery.

Response: The best available information, as presented in the 2011 SAR and in the most recent SAR (draft 2012 SAR), both indicate that average annual incidental M&SI of Hawaii Insular false killer whales in the deep-set longline fishery exceeds the stock’s PBR level (Carretta et al., 2012a, b). As explained in the final 2011 and draft 2012 SARs, takes of false killer whales of unknown stock origin within the Hawaii Insular/Pelagic stock overlap zone are prorated, given that no genetic samples are available to establish stock identity for the takes, and both stocks are considered at risk of interacting with longline gear within this region.

In the final 2011 and draft 2012 SARs, the Hawaii Insular stock of false killer whales is designated as a strategic stock, and is incidentally killed or seriously injured in the Category I deep-set longline fishery (Carretta et al. 2012a, b). The stock therefore meets the requirements for inclusion within the scope of the FKWTARP.

Comment 22: HLA states that the deep-set longline fishery does not have a “high level” of M&S across a number of stocks, and the only stock with which the deep-set longline fishery has interactions that are more than discountable is the Hawaii Pelagic stock of false killer whales. HLA argues that because the deep-set longline fishery does not have a high level of interactions across a number of stocks, no non-strategic stocks can be included within the scope.

Response: NMFS reviewed the most recent bycatch estimates for marine mammals incidentally killed or seriously injured in the Category I deep-set longline fishery to determine whether there is a high level of interactions across a number of non-strategic stocks. The fishery has documented interactions with a number of non-strategic marine mammal species and stocks, both within the U.S. EEZ and on the high seas, including false killer whales (Palmyra Atoll stock), Risso’s dolphins (Hawaiian stock), common bottlenose dolphins (Hawaiian Pelagic stock), Pantropical spotted dolphins (Hawaiian stock), striped dolphins (Hawaiian stock), short-finned pilot whales (Hawaiian stock), and Blainville’s beaked whales (Hawaiian stock). The final 2011 SAR (Carretta et al., 2012b) indicate the 5-year average annual M&S for those seven marine mammal species observed to be taken by the fishery inside the U.S. EEZ around Hawaii (i.e., where PBRs are calculated) range from 0 percent of PBR (i.e., no M&S inside the U.S. EEZ) to 4.7 percent of PBR, within the insignificance threshold. PBR is currently unavailable for marine mammals on the high seas, and thus the impact of the marine mammal bycatch on the high seas has not been determined. However, overall levels of M&S of these non-strategic stocks on the high seas are low, at levels similar to those inside the U.S. EEZ around Hawaii. Therefore, NMFS has determined that the Category I deep-set longline fishery does not have a high level of M&S across a number of non-strategic marine mammal species and stock, and is not important in characterizing the strength of any given hook. The commenter stated that the Palmyra Atoll stock will still benefit from the Plan since most of the regulatory measures apply to the deep-set fishery wherever it operates.

Comment 23: HLA argues that the Palmyra Atoll stock of false killer whales should not be included in the scope of the FKWTARP. HLA states that the stock is not strategic, and given the insignificant interaction rate, it is debatable whether the deep-set longline fishery can be said to “interact with” the stock at all.

Response: For the reasons discussed in the section “Distribution and Stock Structure of False Killer Whales in the Pacific Islands Region”, and in our response to comment 22, NMFS is removing the Palmyra Atoll false killer whale stock from the Plan’s scope.

Comments on Specific Measures in the FKWTARP

Hook Requirements

Comment 24: Numerous commenters (MMC, HSUS, TIRN, individuals) supported the proposed weak circle hook requirements. MMC stated that whether or to what extent weak circle hooks will reduce false killer whale and M&S is unclear, but MMC believes this mitigation measure warrants implementation to determine its effectiveness, particularly given the success of weak hooks in reducing untargeted bycatch in other fisheries.

Response: NMFS agrees that weaker circle hooks in the deep-set longline fishery are a promising measure that is expected to reduce the number and severity of false killer whale hooking injuries. However, the 4.0 mm wire diameter circle hooks that were proposed to be required in the fishery need additional research to ensure the effectiveness as a mitigation measure and their ability to retain target catch. Until those hooks can be examined further, NMFS is requiring circle hooks with a maximum wire diameter of 4.5 mm, which are weaker than hooks currently used by approximately 80 percent of the fishery.

Comment 25: Lindgren-Pitman, Inc. stated concerns regarding a lack of engineering and manufacturing science that was included in the research that forms the basis of these proposed regulations, including no specification of design criteria to enable release of a false killer whale and retention of all catch, no testing of alternate hook designs, no specification of failure threshold, and no consideration of metallurgy and manufacturing process, which are most important in characterizing the strength of any given hook. The commenter stated that the
sample size of hooked false killer whales is so low that there is no way to quantify whether or not using weak hooks would limit the take of false killer whales at all. The commenter suggested that ease of enforcement should take a back seat to sound science and an engineering approach when researching alternative gear. The commenter does not support the proposed regulations, and instead supports the status quo.

Response: The Team recommended and NMFS proposed the required use of a hook that was expected to allow release of hooked false killer whales. NMFS does not have information on the pull strength necessary to enable release of a false killer whale, and focused on testing hook types similar to those currently in use by the fleet, but with a weaker bending strength that would allow a large marine mammal to escape. This approach built on the concept of weak hooks that were tested in Gulf of Mexico and Atlantic pelagic longline fisheries. Although we agree with the commenter that there will still be variations in hook designs, failure thresholds, and manufacturing processes, NMFS believes that requiring an overall reduction in wire diameter to 4.5 mm will produce a net positive conservation benefit to the false killer whale. We note that the collective judgment of the Team—which was composed of fishing industry representatives, marine biologists, environmental groups, NMFS, State, and Council employees, and academics—after considering all available scientific and commercial information on the subject, also called for the use of a smaller diameter wire. NMFS believes the hook specifications in this final rule will be sufficient to reduce false killer whale serious injuries, but will monitor their effectiveness as part of the larger FKWTWP monitoring strategy.

Continued research and development of “gear fixes” or other technologies will be important for long-term reduction of false killer whale depredation and hooking. NMFS will continue to prioritize gear research to support false killer whale take reduction.

Comment 26: The Council and HLA stated that the proposed maximum 4.0 mm wire diameter requirement is unnecessarily restrictive and would negatively impact the fishery. They argued that the Bigelow et al. (2011) study did not sufficiently demonstrate that there would be no significant impact to the deep-set longline fishery of using circle hooks with 4.0 mm wire diameter. The commenters note that the study was not conducted during the time of year when the largest bigeye tuna are historically caught, and the fish caught during the study period were substantially smaller than fish caught during that same time frame in previous years, and thus the study was not able to confirm whether larger bigeye tuna could be retained on the 4.0 mm wire diameter hooks.

Response: These concerns were discussed at the July 2011 Team meeting and again by a sub-group of the Team representing a cross-section of Team members and interests (see the July 2011 Key Outcomes Memo and the December 13, 2011 call summary for the Weak Hook Work Group, available online at http://www.nmfs.noaa.gov/pr/interactions/fkwtrp/). The seasonality of the deep-set fishery’s target catch size and value was confirmed in a follow-up analysis by NMFS (Bigelow, 2012). The results of the original study (Bigelow et al., 2011), showing no significant difference in target species catch between the two hook types tested, may not be valid for other parts of the year when landed bigeye tuna are typically larger.

NMFS does not have sufficient information to require the use of circle hooks with a maximum of 4.0 mm (0.157 in) wire diameter in the deep-set fishery. However, as discussed in the preamble, the Team’s recommendation of a 4.2 (0.165 in) or 4.0 mm (0.157 in) diameter hook was based on the assumption at the time that the standard diameter in use by the industry was 4.5 mm (0.177 in), rather than the more commonly used 4.7 mm (0.185 in) or 5.0 mm (0.197 in). Accordingly, NMFS is requiring a fleet-wide change to 4.5 mm (0.177 in) wire diameter for circle hooks, so as to achieve a comparable reduction in hook wire diameter based on the updated information.

Comment 27: HLA argued that NMFS has not performed an analysis of the effects of implementation of a 4.0 mm weak hook—one on the fishery, on manufacturers, on dealers, and on associated businesses—that is sufficiently thorough, detailed, or otherwise acceptable to justify a major change in gear that will assuredly have unintended consequences.

Response: For reasons described in other parts of this rule (see “(1) Hook Requirements” under “Regulatory Measures” and comments/responses 24, 26, and 28), NMFS is not requiring that circle hooks have a maximum wire diameter of 4.0 mm (0.157 in) at this time. Instead, consistent with the Team’s unanimous findings that requiring circle hooks and reducing wire diameter to 4.5 mm will produce a net positive conservation benefit to the false killer whale, NMFS is requiring a maximum wire diameter of 4.5 mm (0.177 in) for circle hooks in the deep-set longline fishery.

Comment 28: The Council and HLA support a maximum wire diameter of 4.5 mm, rather than 4.0 mm. The commenters state that new information indicates 4.5 mm is not the “standard” wire diameter as was previously believed, and at least half the vessels in the fleet use hooks with wire diameters greater than 4.5 mm, including some J hooks. Therefore, a 4.5 mm circle hook requirement would mark a significant change in the current fishery, in terms of an overall reduction of hook wire diameter and a complete elimination of J style hooks.

HLA also noted that requiring a maximum of 4.5 mm wire diameter would meet the Team’s intent that the hook should be the weakest link in the terminal gear, especially considering that many boats currently use hooks that are stronger than the branch line and wire trace. Further, the Council and Lindgren-Pitman, Inc. argued that false killer whales are capable of straightening circle hooks with 4.5 mm wire diameter, as documented in Bigelow et al. (2011).

Response: NMFS is requiring the maximum wire diameter requirement for circle hooks in the deep-set longline fishery to 4.5 mm (0.177 in), based partly on the information provided by the commenters (which was confirmed by NMFS’ discussions with major hook suppliers for the fishery). NMFS agrees that, based on the updated information on the hooks currently used in the fishery, the required use of circle hooks with 4.5 mm (0.177 in) wire diameter is expected to reduce mortalities and serious injuries of hooked false killer whales.

Comment 29: Lindgren-Pitman, Inc. commented that crew safety is a concern, noting that compromising the strength of the gear between the leaded swivel and the fish can be a serious working hazard, and weak hooks are inherently more dangerous than the status quo.

Response: Crew safety is a very important consideration for any fishery management measure. The hooks required by this final rule are stronger than those that were proposed and are already used by a segment of the deep-set fishery. NMFS, and the Team (including longline fishermen), did not identify the use of circle hooks with 4.5 mm wire diameter as a crew safety concern.

Comment 30: Several commenters (TIRN, HLA, individuals) requested additional research (including J hooks) to validate and improve their effectiveness. HLA specifically recommended a new
study to assess the effects of using hooks with a wire diameter of less than 4.5 mm (i.e., compare 4.5 mm, 4.2 mm, and 4.0 mm), and based on the results, NMFS should require the deep-set fishery to use the hook with the smallest wire diameter that does not have a substantial impact on the size or value of bigeye tuna.

Response: NMFS agrees that further research is needed to test weak hooks and to determine whether weaker hooks might be used in the fishery. NMFS will prioritize and pursue weak hook research as funding allows.

Comment 31: The Council, HLA, and individuals recommend eliminating the limit on maximum hook size in the deep-set fishery; further, the Council requests that NMFS consider a minimum hook size requirement instead of a maximum. The Council states that the Team’s original recommendation concerning hook size in the Draft FKWTTRP was only based on the common circle hook size currently found in the fishery, and was not intended to specify maximum or minimum hook sizes. The Council argues that there is no evidence that smaller hooks are less detrimental to false killer whales than larger hooks.

The commenters cite the benefits of larger circle hooks at reducing bycatch rates of protected species (e.g., sea turtles, seabirds, and vulnerable fish species), and state that any hook requirement should not compromise the potential benefits from use of larger hooks, including the ability of fishermen to innovate. Additionally, they stated that if a maximum wire diameter is specified, larger hooks of the same wire diameter are more likely to straighten than smaller hooks due to mechanics of leverage, providing greater potential for false killer whales to free themselves from the hook. However, HLA notes that it is highly unlikely that deep-setting vessels would use hooks greater than 16/0 that are less than 4.5 mm in diameter because they would likely not fish effectively.

Response: NMFS generally agrees with these commenters and is not regulating the size of circle hooks in the deep-set fishery. The proposed maximum size requirement was based on the language in the Draft FKWTTRP, and analyses that indicated false killer whales and blackfish are less likely to be hooked or, if hooked, would have fewer deaths and serious injuries on small circle hooks compared to other hook types. These analyses are described in the Draft FKWTTRP and Forney et al. However, they mainly compare the effect of hook shape (i.e., tuna, J, and circle), rather than hook sizes. This is primarily because large (18/0) circle hooks are used very infrequently in the deep-set fishery, and no false killer whales or blackfish have been observed to be hooked on large circle hooks.

NMFS has insufficient information to indicate that the size of the circle hook affects false killer whale hooking rates or injury severity. Although the Team discussed the possibility that it may be more difficult for smaller circle hooks (14/0, 15/0, 16/0) to get around and become embedded in a false killer whale’s jaw compared to larger circle hooks, the Team also considered information that larger circle hooks with only a 4.5 mm wire diameter might be more likely to straighten under the pull of a false killer whale. In short, the available information does not convince us that larger circle hooks (18/0) should be prohibited under the FKWTTRP.

In addition, NMFS has long recognized the potential of larger circle hooks to reduce bycatch of other protected species. Given these benefits to other protected species, including sea turtles, and the lack of information about adverse effects on false killer whales, NMFS does not want to discourage their use. If fishermen do choose to use larger circle hooks, the FKWTTRP regulation regarding maximum wire diameter (4.5 mm) would still apply. Additionally, both large and small circle hooks are significantly weaker than tuna hooks.

The Council suggested that NMFS specify a minimum size for circle hooks in the deep-set fishery, rather than a maximum size. NMFS is not including such a specification in this final rule as it was neither discussed by the Team nor included in the proposed FKWTTRP. However, if the FKWTTRP regulations result in a switch by the fleet to smaller hooks, and if those smaller hooks show an increased rate of false killer whale M&SI or increased bycatch of other protected species, regulation of minimum hook size may be considered in the future.

Comment 32: TIRN and individuals requested additional research to determine if smaller hooks can be required in the future to better protect false killer whales.

Response: As described in the response to comment 31 above, there is no information to indicate that the use of smaller circle hooks results in injuries to false killer whales that are less serious than larger circle hooks. However, NMFS will continue to collect and evaluate data on circle hook size and false killer whale injury rates to determine whether there is a relationship.

Comment 33: HLA does not support the proposed requirement for hooks to use only round, non-flattened wire. HLA stated that the TRT recommended the use of round wire simply to allow for the wire diameter of some portion of the hook shank to be measured, and noted that effective enforcement of a wire diameter requirement can occur by requiring compliant hooks to contain sufficient round wire to be measured with a caliper or other appropriate gauge. HLA further stated that no circle hooks currently on the market meet this “non-flattened” wire requirement.

Response: The proposed regulatory requirement that hooks be made of round wire was taken directly from the Team’s recommendations (the Draft FKWTTRP). NMFS agrees that the intent of the requirement was to allow for enforcement of the wire diameter regulation. NMFS did not intend this aspect of the hook specifications to preclude the use of circle hooks currently on the market. Therefore, we are requiring that hook shanks need only contain round wire that can be measured with a caliper or other appropriate gauge. This meets the Team’s and NMFS’ intent without unnecessary restrictions on hook design.

Comment 34: MMC suggested that NMFS consider defining weak hooks based not only on the wire used to make them, but also on the force required to straighten them (e.g., an average of 205 pounds). To be able to enforce such a provision, MMC recommended NMFS test available hooks to determine which meet those standards and provide fishermen with a list of approved hook types and hook manufacturers allowed in the fishery. HLA commented that they do not support specifying a single or a few “authorized” hooks, creating a hook “template,” specifying the pull strength or required hook materials.

Response: NMFS is not including a regulatory definition for the force required to straighten compliant hooks. Consistent with the Team’s recommendation, the aim of the Plan’s maximum wire diameter specification is to increase the likelihood that a hooked false killer whale will be able to straighten the hook and release itself without serious injury. We acknowledge that threshold bending strength is unknown, and that a false killer whale’s ability to release itself will likely vary according to the circumstances of each individual interaction. Based on NMFS’ preliminary testing, we know that in at least some circumstances, a false killer whale can straighten and escape from a 15/0 stainless steel circle hook with a wire diameter of 4.5 mm (0.177 in), which straightens at around 303 pounds.
(138 kg) of pull (Bigelow et al., 2011). However, the estimate of those hooks’ straightening strength is based on a small number of hooks tested. (For more information, see “Hook Strength Test Results,”” presented to the Team at the June 2010 meeting; available online at http://www.nmfs.noaa.gov/pr/interactions/fkwtrp/meeting3.htm).

NMFS does not have sufficient information to require a particular bending strength for circle hooks, so is therefore not including such a specification in regulations.

Comment 35: The Council stated that adverse impacts to the longline industry could be avoided with delayed implementation of the weak hook requirement as well as a gradual phase-in period over a reasonable period of time, noting that this would allow gear suppliers to stock required hooks after the final rule is published, and for vessels to switch over to weak hooks as part of the regular hook replacements resulting from hook loss after each trip, and spread out the one-time cost per vessel over the phase-in period. HLA specifically suggested that any new gear requirement be delayed such that they are effective at least one year after necessary quantities of new gear are acquired by suppliers (i.e., one year plus a number of months to allow for manufacture and distribution of new hooks).

Response: NMFS proposed the required use of hooks that were not currently produced or commercially available, and thus a lengthy delay in implementation of the requirement may have been necessary, as suggested by the commenters. However, as described above (see “(1) Hook Requirements” under “Regulatory Measures”) and in response to comments (e.g., comments/ responses 24, 26–28, 31, and 33), NMFS has established specifications that were recommended by the Team for hooks that must be used by the deep-set longline fleet. These hooks are already commercially available, and thus a shorter timeframe is needed for implementation of this measure. The hook requirement will go into effect xx days after this rule is published in the Federal Register. NMFS considers this implementation time frame necessary to allow the Plan to reach the short-term goal of reducing M&SI to below PBR levels within six months, and believes this provides adequate time for suppliers to obtain the necessary supply of hooks and for fishermen to change over their gear.

Branch Line Requirements

Comment 36: MMC stated that the thickness of monofilament line may not be a consistent indicator of breaking strength, and a performance-based standard should be considered together with the minimum diameter requirement for longline leaders and branch lines.

Response: NMFS recognizes that the breaking strength of monofilament line may vary based on a number of factors, including age (new vs. used), stretching, storage conditions (e.g., exposure to UV rays), or whether the line has been soaked versus dry when the strength is tested. There may also be differences in breaking strength within a spool of monofilament. In recognition of these differences, and the difficulty in enforcing a performance-based standard, the FKWTRP does not include a performance-based standard for branch lines and leaders. NMFS considers specification of a minimum diameter for monofilament leaders and branch lines to be sufficient.

Deep-setting vessels in the Hawaii-based fleet typically use monofilament branch lines but wire leaders. The wire used is typically stronger than monofilament. However, to ensure that any material used in the branch line or leader is at least as strong as the specified monofilament, NMFS is including a performance standard (minimum breaking strength of 400 lbs (181 kg)) for any materials other than monofilament line.

Comment 37: HLA commented that any requirement for branch line diameter should take effect at least one year after necessary quantities of the new gear are acquired by suppliers.

Response: Monofilament branch line with a minimum diameter of 2.0 mm is already widely available and used in the fishery. However, NMFS recognizes that it will take fishermen time to change over gear. This change would most efficiently be accomplished at the same time as changing over hooks. Therefore, regulation is effective at the same time as the hook requirement, which is 90 days following publication of this final rule in the Federal Register.

Main Hawaiian Islands Longline Fishing Prohibited Area

Comment 38: MMC supports the proposed year-round closure around the MHL stating that it is necessary to reduce the risk of longline fishing to the Hawaii Insular stock.

Response: NMFS is closing this area to longline fishing year-round in this final rule. In the FKWTRP regulations at 50 CFR 229.37, NMFS is closing the area within the existing February-September boundary (50 CFR 665.806(a)(2)(i)) to longline fishing year-round. NMFS is also revising the existing longline fishing prohibited area regulations at 50 CFR 665.806(b) by removing the seasonal boundary change, to be consistent the FKWTRP regulations.

Comment 39: HLA disagrees that longline fishing within the seasonally open area may be affecting the Hawaii Insular stock, but HLA believes that the proposed year-round restriction would effectively eliminate any risk of any kind (if any exists at all) from the longline fleet to the Hawaii Insular stock. HLA requested that the rule should recite the Team’s statement as such (see p. 60 of the Draft FKWTRP).

Response: The best available information indicates that the Hawaii Insular stock of false killer whales is at risk of interacting with longline fishing gear within the portion of the Hawaii Insular/Pelagic stock overlap zone where longline fishing occurs, and the draft 2012 SAR reports an estimated 0.5 Hawaii Insular false killer whales killed or seriously injured in the deep-set longline fishery each year (Carretta et al. 2012a).

The Team stated in its recommendations to NMFS that a year-round closure of the MHL longline fishing prohibited area would eliminate any risk from the longline fisheries to the Hawaii Insular stock. Although the closure is expected to substantially reduce the risk of longline fishing to the Hawaii Insular stock, we disagree that all risk to the Hawaii Insular stock can be eliminated. NMFS believes that there remains a small risk of incidental interactions with the longline fisheries within the area of the Hawaii Insular/Pelagic stock overlap zone that would remain open to longline fishing.

Longline fishing is already prohibited year-round from the entire core range of the Hawaiian Insular population and a portion of the Hawaii Insular/Pelagic population overlap zone (50 CFR 665.806(a)(2)(ii)), and seasonally in an additional portion of the overlap zone (50 CFR 665.806(a)(2)(i)). This final rule would prohibit longline fishing year-round around the MHI within the current February-September exclusion zone boundary. The boundary is not a uniform distance from shore, but ranges from 78.6 km (42.4 nm) to approximately 200 km (108.0 nm) (Baird, 2009). Longline fishing would be still allowed within approximately 26 percent of the Hawaii Insular/Pelagic population overlap zone.

NMFS believes that false killer whales from the Hawaii Insular and Hawaii Pelagic populations are not uniformly distributed within the overlap zone, but show a gradient: the Hawaii Insular population decreases with increasing distance from shore,
and the density of the Hawaii Pelagic population decreases with decreasing distance to shore (McCracken, 2010; Carretta et al., 2012a). Therefore, false killer whales in the offshore portions of the overlap zone (i.e., in the area where longline fishing would still be allowed) are more likely to be from the Hawaii Pelagic population. Although Hawaii Insular false killer whales would largely be protected from incidental interactions with the longline fisheries, a small risk remains. NMFS expects other proposed measures in the final FKWTTRP, including the required use of circle hooks in the deep-set longline fishery, to further mitigate the risk to Hawaiian Insular false killer whales.

Comment 40: HLA stated that the current MHI prohibited area and the proposed MHI prohibited area have different regulatory purposes, so HLA requests that the year-round closure set forth in the proposed rule be identified separately in the regulations implementing the TRP, and the separate bases for each of the exclusion zones be explained in the final rule. HLA noted that this would better reflect the intent of the Team.

Response: NMFS agrees that the original and proposed MHI longline fishing prohibited areas have different regulatory purposes. In this final rule, NMFS is establishing the longline fishing prohibited area under the FKWTTRP, with the same boundary as the current February-September MHI longline prohibited area. This final rule specifically notes that the reason for implementing this closure is false killer whale conservation. Additionally, under the authority of the MSA, NMFS is revising the regulations in 50 CFR 665.806 prescribing the existing MHI longline fishing prohibited area by removing the seasonal boundary change. This action will align the boundaries of the MHI longline prohibited with those of the prohibited area established under this FKWTTRP, and is necessary to ensure that existing regulations applicable to the management of the longline fishery are consistent with the requirements of the FKWTTRP and the MMPA.

Comment 41: HLA stated that the current seasonal contraction of the boundary would be re-implemented.

Response: This final rule explains the basis for the MHI longline fishing prohibited area (see “(3) Main Hawaiian Islands Longline Fishing Prohibited Area” under “Regulatory Measures”). As noted in response to comment 39, NMFS expects this closure will substantially reduce, but will not eliminate, the impact of longline fisheries on the Hawaii Insular stock. NMFS, in consultation with the Team, will monitor the effectiveness of the FKWTTRP in meeting its take reduction goals, and may adapt or amend the FKWTTRP in the future as new information on false killer whale populations and the impacts of longline fisheries on the populations becomes available.

Southern Exclusion Zone

Comment 42: HLA objected to many of the SEZ measures as proposed, specifically the way the SEZ deviates from the Team’s recommendations. HLA stated that the SEZ provisions recommended by the Team were carefully crafted, fair, the product of deliberate compromise, and fully consistent with the MMPA goals, and should be implemented in the FKWTTRP.

Response: NMFS proposed SEZ measures that were somewhat different from the Team’s recommendations because, given the very low PBR for the Hawaii Pelagic stock of false killer whales at the time the proposed FKWTTRP was published, NMFS was concerned that the Team’s recommended measures were not sufficient to reduce false killer whale M&SI to below PBR. However, largely due to the increase in PBR for the Hawaii Pelagic stock of false killer whales resulting from the 2010 HICEAS survey, as reflected in the draft 2012 SAR, NMFS is implementing SEZ measures that are consistent with the Team’s recommendations. As more fully described in the preamble (see section “(8) Southern Exclusion Zone Closure”), we believe that the Team’s recommendation provides sufficient conservation benefits, given the new PBR. NMFS will continue to evaluate and consult with the Team on refinements to the SEZ trigger/closure that will help respond to potential changes in PBR. If future refinements are necessary, they will be implemented by appropriate rulemaking.

Comment 43: HLA stated that the MMPA’s take reduction goals are just goals, not required mandates, and argued that MJI’s are not drafted as mandatory standards, perhaps to reflect Congress’ understanding that effective take reduction planning often involves compromise based on conflicting professional judgments, as well as incomplete and uncertain information. Nevertheless, we also believe that a Plan’s successful implementation will depend in large part on whether it is reasonably calculated to achieve both the short and long-term goals expressed in Section 118.

The SEZ trigger and closure measures were recommended by the Team as an important component of a Plan for reducing false killer whale M&SI to achieve the MMPA’s goals, particularly given the uncertainty of the other measures to reduce M&SI to necessary levels. The SEZ measures provide a mechanism by which to gauge the deep-set longline fishery’s observed M&SI in comparison to PBR and to implement a closure as a consequence of exceeding PBR, without the necessity of additional rulemaking to initiate the closure. In this regard, the SEZ trigger and closure measures provide a critical and predictable stopgap if and when other regulatory measures fail to adequately protect false killer whales, as MMPA requires.

Comment 44: TIRN and individuals commented that the determination to close the SEZ is not based on the most transparent and conservative estimate of false killer whale PBR, and recommended the rule be modified to ensure PBR is never exceeded.

Response: The most recent estimate of PBR for the Hawaii Pelagic stock of false killer whales is calculated and presented in the draft 2012 SAR (Carretta et al., 2012a), and is used in the calculation of the trigger for closing the SEZ. Although this PBR value was not available at the time of the Team’s recommendations or the proposed rule, both the Team’s consensus FKWTTRP and the proposed FKWTTRP identified a process for closing the SEZ that was based, in part, on a PBR value that would change when new information became available. The SEZ management measures in this final rule, specifically the trigger calculation and reopening criteria, have been revised to be consistent with those recommended by the Team. The trigger calculation and
closure procedures are more straightforward and transparent in specifying a consequence SEZ closure if and when PBR is exceeded by the deep-set longline fishery. This FKWTRP is designed to reduce false killer whale M&SI to below PBR, and in the longer-term, to insignificant levels approaching a zero M&SI rate. NMFS will monitor the success of the FKWTRP at meeting these goals, and will examine each measure, including the SEZ, to determine its efficacy in reducing M&SI to levels below PBR. Comment 45: HLA commented that NMFS should consider implementing the SEZ portions of the FKWTRP rule in final after the new PBR is released and after the new gear requirements are phased in. HLA stated that this would allow NMFS to best judge whether the fishery is having an effect on the Hawaii Pelagic Stock that actually results in fishery closures, and whether the gear changes are effective.

Response: The final rule is based on the best available information, including the draft 2012 SAR (Carretta et al., 2012a) and its newly calculated estimates of abundance and PBR for the Hawaii Pelagic stock of false killer whales.

Given the 90-day delay in implementation for gear requirements (hook and branch lines), NMFS is implementing the SEZ provisions immediately following the rule’s 30-day delay in effectiveness, to ensure that there are take reduction measures in place to protect the false killer whale stocks from additional M&SI while the gear requirements are being phased in. NMFS will monitor false killer whale M&SI following implementation of gear changes to determine whether they are having the intended effect in reducing M&SI.

Comment 46: Earthjustice stated that the SEZ management measures should apply to all commercial fisheries that may interact with false killer whales, including the deep-set and shallow-set longline and shortline fisheries. Earthjustice, TIRN, and individuals specifically noted that M&SI from all commercial fisheries within the U.S. EEZ should count toward the trigger.

Response: The SEZ measures apply only to the deep-set longline fishery, as recommended by the Team and proposed by NMFS. The main reasons for limiting the measures to the deep-set fishery are the fishery’s high rate of false killer whale M&SI and level of effort within the U.S. EEZ. The shallow-set longline fishery operates largely outside of the U.S. EEZ around Hawaii, and thus has a low likelihood of interacting with a false killer whale within the U.S. EEZ. In addition, the shallow-set longline fishery, with 100 percent observer coverage, has a low interaction rate with false killer whales. Accordingly, an SEZ closure (within the U.S. EEZ) is not viewed as a necessary measure for reducing false killer whale M&SI in the shallow-set fishery. Therefore, M&SI of false killer whales in the shallow-set longline fishery will not count toward the SEZ trigger, and the shallow-set longline fishery will not be affected by any closure of the SEZ. However, M&SI of false killer whales in the shallow-set longline fishery will still be included in NMFS bycatch estimates and would be presented in the SAR.

The Hawaii shortline fishery is not currently under the scope of the FKWTRP (see comments/responses 15–20 for more information). Therefore, SEZ provisions do not apply to the shortline fishery.

Comment 47: HSUS expressed concern that a closure of the SEZ may result in fishermen converting longline gear to shortline gear and still fish in the area, and that the proposed FKWTRP has no ability to address the possible conversion of gear that could lead to higher rates of mortality in fisheries that are poorly monitored and managed.

Response: NMFS previously addressed a similar but more general comment related to the conversion of longline gear to shortline gear (see comment/response 16). The Hawaii-based deep set fishery is currently subject to a wide range of federal requirements, including catch limits, limited entry requirements, observer coverage, and catch reporting. To date, NMFS is unaware of any movement by fishermen into shortlining on account of increased federal management. NMFS will monitor reported fishing effort in the longline and shortline fisheries, and consider any other available sources of information to gauge whether gear conversion of longline to shortline is occurring as a result of SEZ or other FKWTRP provisions.

Comment 48: The Hawaii DLNR commented that the SEZ closure should not apply to nearshore fisheries, particularly the kaka line fishery.

Response: The SEZ provisions apply only to the deep-set longline fishery. Nearshore fisheries, including the kaka line fishery, are not currently affected by the FKWTRP or implementing regulations.

Comment 49: HLA stated that the proposed rule was not clear about how false killer whale M&SI that occur within the Hawaii Insular/Pelagic stock overlap zone are counted toward the trigger. The commenter stated that for bycatch estimates, the animal would be prorated based on NMFS’ model, and this prorated animal cannot count as a whole interaction for the purposes of the SEZ provisions.

Response: As stated in the proposed rule and repeated in this final rule, for purposes of implementing the SEZ, false killer whales that are mortally or seriously injured in the deep-set longline fishery within the U.S. EEZ around Hawaii will be considered to be from the Hawaii Pelagic stock unless there is information to indicate that the animal belongs to the Hawaii Insular stock. Therefore, false killer whale M&SI that occurs within the Hawaii Insular/Pelagic stock overlap zone would be considered to be Hawaii Pelagic false killer whales, unless photo-identification or genetic analysis can definitively tie the animal to the Hawaii Insular stock. NMFS emphasizes that the rough extrapolations of M&SI and accounting of those M&SI for purposes of implementing the SEZ trigger/closure do not represent the official bycatch estimates for false killer whales in the fishery; the official bycatch estimates are calculated by separate methods and are presented in the annual SARs. While M&SI of false killer whales of unknown stock origin within the Hawaii Insular/Pelagic stock overlap zone are prorated as part of bycatch estimates for the SAR, the prorating methods will not be applied for purposes of implementing the SEZ.

Comment 50: HSUS commented that changes made from the Draft FKWTRP for calculating the SEZ triggers are in keeping with the general intent of the Team’s recommendations, but appear more practical for NMFS from a management perspective. HSUS also understands the agency’s rationale for changes to the procedures that would lead to either re-opening and/or re-closing a closed area.

Response: NMFS acknowledges the comment.

Comment 51: HLA supports some of the proposed SEZ measures that are consistent with the Team’s recommendations, including a trigger based, in part, on PBR (recognizing that PBR can change) and a two-step closure process in which the SEZ may be closed for the remainder of the calendar year if the first trigger is reached and then closed for a longer period of time if a second trigger is reached. HLA commented that a two-trigger approach is essential because it creates an incentive for the fishery to find a solution and gives the other elements of the FKWTRP a chance to prove effective. HLA stated that any SEZ provisions implemented by NMFS...
cannot result in an indefinite closure of the SEZ after a single trigger is reached.

Response: NMFS is including the two-trigger approach for managing the SEZ, as recommended by the Team. Also consistent with the Team’s recommendations, the trigger in this final FKWTRP is based in part on PBR.

Comment 52: HLA commented that specifying alternative triggers based on a “floor” number (of a minimum of two) and a PBR exceedance (for both the first and second triggers), as recommended by the TCT, is essential because they help to account for the fact that the current PBR is not based on the best available data.

Response: The triggers in this final FKWTRP are the same as those recommended by the Team. As noted throughout this rule, the FKWTRP relies on abundance estimates and PBR calculations presented in the draft 2012 SAR, which represents the best available information. Although this PBR value is not available at the time of the Team’s recommendations or the proposed rule, both the Team’s consensus FKWTRP and the proposed FKWTRP anticipated that PBR would change as new abundance information became available.

Comment 53: HLA stated that the first and second triggers should be identical, as outlined in the Team’s consensus Draft FKWTRP. HLA further commented that the second trigger should not be more stringent than the first trigger because a substantial change in the fishery will likely have occurred between the time the first and second triggers are met (e.g., more rigorous captain and crew training, implementation of and experience with new gear requirements, more crew awareness).

Response: The first and second triggers in this final FKWTRP are identical to each other, as recommended by the Team and described above (see “(a) Defining the Trigger” under “Regulatory Measures”). The triggers are both designed to result in closure of the SEZ if false killer whale M&SI exceeds PBR.

Comment 54: The Council and HLA do not support the approach of tying the second closure to a single additional observed mortality or serious injury because, as proposed, it does not allow for an adjustment of the trigger based on any newly calculated PBR within that timeframe.

Response: NMFS has modified the SEZ trigger and closure scheme for this final FKWTRP to most closely conform to the Team version of the Draft FKWTRP, such that the second closure is no longer tied to a single observed mortality or serious injury. Furthermore, the SEZ trigger and closure scheme accounts for a changing PBR value.

Comment 55: HLA commented that the rule should include provisions to account for a situation in which the first trigger is reached (and the fishery is closed) based on exceedance of an inaccurate and outdated PBR. HLA noted a potential worst-case scenario of a fishery closure based on a trigger that uses the old PBR, only to learn after the fact that the fishery would not have been closed if the correct PBR had been used as the trigger.

Response: This FKWTRP is based on the best available information, including a newly updated abundance estimate and PBR for the Hawaii Pelagic false killer whale stock, as reported in the draft 2012 SAR. The triggers will be calculated using the most updated estimate of PBR, and revised whenever changes in PBR or observer coverage would change the trigger value.

Comment 56: HLA commented that the trigger need not be based on a PBR reported in the current SAR, stating that the MMPA does not require that a discrete element of a TRP be tied directly to the SAR.

Response: The MMPA’s take reduction goals are tied directly to PBR, which is reported in the SAR. Using the PBR reported in the most recent SAR for calculating the SEZ trigger ensures that decisions are based on the best available information, and is the most effective way to set a trigger that would ensure the FKWTRP is meeting the MMPA-specified goals.

Comment 57: HLA and Earthjustice commented on the false killer whale M&SI that might be observed in the calendar year in which the final rule is published, but before the specified effective date of the final rule. HLA supported only counting toward the trigger those M&SI that occur after the rule is effective, as was proposed. Earthjustice recommended that those observed M&SI should “count” toward the trigger, by adjusting the first year’s trigger to reflect the percentage of the entire fishing year that remains.

Response: NMFS is not prorating the trigger for the remainder of the first year, and only those serious injuries or mortalities that occur after this final rule is effective will count toward the trigger. The trigger specifies the total number of observed false killer whale M&SI allowed per year. The SEZ is a stopgap measure, designed to work in concert with other measures in the Plan. NMFS believes that the Plan must be given an opportunity to demonstrate effectiveness, and that fishermen should be encouraged to reduce false killer whale M&SI by changing fishing practices prior to an SEZ closure. For this reason, NMFS will implement the annual trigger for the remaining part of this calendar year.

Comment 58: Earthjustice stated that the proposed trigger and closure implementation would allow levels of M&SI far in excess of PBR to continue indefinitely without ever triggering closure of the SEZ. The commenter argued that the proposed SEZ measures have “statistical amnesia” such that if M&SI in a single fishing year approaches, but does not exceed, the total amount of M&SI allowed for a five-year period (i.e., the first trigger is not met), that excessive level of M&SI is ignored when considering whether the SEZ should be closed due to additional M&SI in following years. The commenter stated that the mechanism for closing the SEZ must be revised to account for cumulative M&SI in all of the fishing years included in the five-year average.

Response: NMFS recognizes that the SEZ trigger and closure mechanism in the proposed rule did not adequately account for the possible scenarios described by the commenter, which would have allowed M&SI to exceed PBR without triggering closure of the SEZ. The measures in this final rule are intended to address those cumulative gaps: closure of the SEZ would be triggered upon PBR exceedance in any single year. However, cumulative M&SI, particularly M&SI that occurs inside the U.S. EEZ around Hawaii after the SEZ is closed, is still not fully addressed by these final SEZ regulations. NMFS plans to consult with the Team and consider revisions to the SEZ measures that will better account for cumulative M&SI in future years, under various scenarios.

Comment 59: The Council stated that if the Team’s consensus approach for the SEZ (outlined in the Draft FKWTRP) cannot be supported by NMFS, an alternative should be considered in calculating the trigger for the SEZ closure, using a simple cumulative sum scheme. The Council provided a detailed description of the potential implementation of such a scheme.

Response: NMFS also put forward an alternative approach for the SEZ that considers cumulative M&SI, and provided details on this alternative trigger calculation.

Response: NMFS is substantially implementing the Team’s approach for the SEZ as outlined in the Draft FKWTRP. However, NMFS recognizes...
that this SEZ approach may not address all possible M&SI scenarios if the Hawaii Pelagic stock’s PBR decreases. Additionally, cumulative M&SI, including M&SI that occurs within the U.S. EEZ around Hawaii after the SEZ is closed, is not fully accounted for. NMFS will consider alternative SEZ measures to be proposed in a future rulemaking, following consultation with the Team. NMFS will consider the Council’s cumulative sum scheme when developing those alternative SEZ measures.

Comment 60: Earthjustice stated that the proposed rule fails to address the situation where NMFS may have delayed publication of the closure trigger. Earthjustice recommends revising the regulations to provide that, if the Assistant Administrator of NMFS does not publish the trigger prior to the start of the fishing year, a formula would apply, and the trigger would remain in place until the Assistant Administrator publishes a trigger based on the factors in the proposed regulation.

Response: In the revised SEZ measures of this final rule, NMFS establishes the trigger as two observed false killer whale serious injuries or mortalities in the deep-set longline fishery in the U.S. EEZ around Hawaii. This trigger will remain in effect until NMFS publishes a new trigger in the Federal Register to supersede the existing trigger. Trigger publication is not required prior to the beginning of each fishing year.

Comment 61: Earthjustice stated that the proposed rule fails to account for potential substantial declines in observer coverage, and suggested that regulations should require prompt publication of a new trigger if actual coverage declines enough to alter the trigger value.

Response: Observer coverage levels are specified on an annual basis per the terms of a contract with the company that provides observer services for PIROP. Observer coverage is therefore unlikely to change during the year such that it would affect the value of the annual trigger for the SEZ. However, in this final rule, NMFS revised regulations that specify the procedures for calculating and publishing the trigger for the SEZ. The final regulations state that the trigger published in the Federal Register will remain in effect until superseded by publication of a revised trigger. NMFS would publish a revised trigger if and when the values of annual observer coverage or PBR of the Hawaii Pelagic stock change such that the trigger value would be altered.

Comment 62: Earthjustice stated that the proposed regulations do not set a deadline for the Assistant Administrator to publish notice of a closure of the SEZ, or to set an outer limit to the delay in closing the SEZ following the notice’s filing. The commenter stated that the regulations should mandate that the Assistant Administrator publish the notice as expeditiously as possible following the observed M&SI that meets the trigger, and, in any event, no later than 30 days after the trigger has been met. The commenter also stated that the regulations should specify that the closure should take effect no later than 15 days after the closure notice is filed.

Response: Closure of the SEZ depends on the ability to confirm the species identification of the false killer whale involved in the interaction and the serious injury determination. While NMFS will attempt to expedite these processes, other factors beyond NMFS’ control may also affect the timing of the analysis. For example, a false killer whale may be taken during an early set of a deep-set fishing trip, and the vessel may not return to port for several weeks after the interaction occurred. For this reason, NMFS cannot set a deadline in regulations for publication of notice of an SEZ closure. However, NMFS will endeavor to complete the process and publish notice of the closure as expeditiously as possible.

While NMFS is not specifying the maximum time period for publishing the notice of SEZ closure after the observed false killer whale serious injury or mortality event that meets the trigger, NMFS is specifying 15 days as the maximum time period between publishing the notice of SEZ closure in the Federal Register and the effective date of the closure.

Comment 63: HLA and the Council commented that the FKWTRP regulations should include the SEZ reopening criteria that were specified in the Draft FKWTRP. HLA noted that the scenarios (represented by criteria) developed by the Team (and described in the Draft FKWTRP) are very narrow and would only be met if there were real progress being made regarding false killer whale interactions in the fishery. HLA also stressed that reopening criteria, even if stringent, would provide important incentives to the fishery to innovate and discover other solutions. The Council suggested that NMFS could include the Team-recommended reopening criteria in the regulations while also including language that allows for the consideration of other scenarios not considered by the Team.

Response: In this final rule, NMFS is including the SEZ reopening criteria specified by the Team in the Draft FKWTRP. In developing the proposed rule, we were concerned that the reopening criteria should reserve sufficient discretion in NMFS to respond to circumstances and exigencies not anticipated by the closure, such as increased M&SI in other fishing areas. After reconsideration of the Team’s recommendations in the Draft FKWTRP, NMFS is satisfied that they address those concerns.

Comment 64: MMC and Earthjustice commented that NMFS should reopen the SEZ only when it can provide assurance that PBR will not be exceeded. Earthjustice recommended regulations that preclude the Assistant Administrator from reopening until and unless the average extrapolated M&SI level in the years since implementation of the FKWTRP regulations—or the most recent five-year period, whichever is shorter—is lower than PBR.

Response: The reopening criteria specified by the Team (in the Draft FKWTRP) and included in this final rule, if met, would provide information that false killer whale M&SI is being reduced to below PBR, annually and over time (e.g., five-year average). In fact, one of the reopening criteria is that the average estimated Hawaii Pelagic false killer whale M&SI for the deep-set longline fishery for up to the five most recent years following Plan implementation is below the stock’s PBR level. The criteria will ensure that the SEZ will remain closed until data show that meaningful M&SI reductions are being achieved.

The SEZ, in combination with the other measures of this FKWTRP, is expected to reduce false killer whale M&SI to below PBR, and eventually to insignificant levels. However, closure of the SEZ, by itself, will not ensure PBR will not be exceeded, given that false killer whale M&SI may still occur in the deep-set longline fishery in other areas of the U.S. EEZ around Hawaii that are still open to longline fishing. The SEZ must be managed adaptively. Therefore, NMFS must retain sufficient discretion to reopen the SEZ if, after consultation with the Team, NMFS determines reopening is warranted (see 50 CFR 229.37(e)(7)(i)). The Team recommended this criterion for cases in which M&SI indicates new, different, or additional management measures may be required to meet the take reduction goal. For example, the SEZ closure could result in redistribution and concentration of fishing effort within the U.S. EEZ to an area that may have a higher temporary density of false killer whales, and thus a higher likelihood of false killer whale interactions. If the
SEZ closure results in an increased rate of false killer whale M&SI within the U.S. EEZ, the area may need to be reopened and alternative management measures explored.

**Comment 65:** The MMC recommended that, similar to a PBR-based formula for defining the trigger to close the SEZ, NMFS should adopt in regulations a corresponding PBR-based formula to determine when the SEZ should be reopened, which would ensure PBR will not exceeded.

**Response:** The reopening criteria specified in this final rule are mainly based on comparisons of the deep-set longline fishery’s estimated false killer whale M&SI to the Hawaii Pelagic false killer whale stock’s PBR. They allow reopening of the SEZ only when M&SI is less than PBR for a specific period of time. As stated in this final rule (see “(8) Southern Exclusion Zone Closure” under “Regulatory Measures”), NMFS will consider revisions to the SEZ in a future rulemaking. NMFS may consider a PBR-based formula for defining an SEZ reopening trigger in a future iteration of the SEZ.

**Other**

**Comment 66:** MMC recommended that NMFS adopt and implement all of the proposed non-regulatory measures referenced in the proposed rule.

**Response:** NMFS is including all proposed non-regulatory measures in this final rule, and has already begun implementation of many of these measures.

**Comment 67:** TIRN and individuals recommended more research to identify additional fishing areas for closure and reduced deep-set longline fishing effort to ensure recovery of false killer whales.

**Response:** NMFS, in consultation with the Team, will monitor the FKWTTRP and determine whether it is meeting its short- and long-term goals. As part of this monitoring, NMFS and the Team will evaluate whether fishery time/area closures are effective in reducing mortalities and serious injuries of false killer whales. At this time, the FKWTTRP does not include reductions in fishing effort.

**Changes From the Proposed Rule**

This section provides a summary of the changes from the proposed rule to this final rule. More detail on the changes and rationale can be found in the “Regulatory Measures” and “Comments on the Notice of Proposed Rulemaking and Responses” sections above.

**Scope**

The non-strategic Palmyra Atoll stock of false killer whales was removed from the scope of this Plan because it was determined that the threshold specified in the MMPA for including non-strategic marine mammal stocks in a take reduction plan (i.e., a Category I fishery has a “high level” of M&SI across a number of such marine mammal stocks), MMPA section 118(f)(1)) was not met.

**Regulations.** This final rule codifies all FKWTTRP regulations at 50 CFR Part 229, rather than splitting them into 50 CFR Parts 665 and 229. The authority under which the regulations are promulgated remains the MMPA.

**Hook requirements.** Three aspects of the hook requirement for the deep-set fishery were changed from the proposed rule. First, NMFS removed the size specification; NMFS had proposed that the circle hooks must be size 16/0 or smaller. For the reasons described above, NMFS has insufficient information to conclude that larger (18/0) circle hooks present a greater risk of M&SI to false killer whales. Second, NMFS is requiring a maximum wire diameter size of 4.5 mm (0.177 in) rather than 4.0 mm (0.157 in), as originally proposed. However, the 4.5 mm (0.177 in) requirement is still expected to result in an overall decrease in wire diameter for most fishermen. Third, NMFS had proposed that the entire hook shank be made of round (non-flattened) wire. This final rule requires that only the hook shank contain round wire that can be measured with calipers.

**MHI Longline Fishing Prohibited Area.** Rather than revising the existing regulations prescribing the longline fishing prohibited area to remove the seasonal boundary change, NMFS is implementing in FKWTTRP regulations in 50 CFR Part 229 a longline prohibited area identical in boundary to the current February-September boundary. This change is necessary to clearly identify the intent of the closure area and the authority under which it is being promulgated. NMFS is also revising the boundaries of the MHI longline prohibited area in the existing regulations in 50 CFR Part 665 to be consistent with the FKWTTRP regulations.

**Southern Exclusion Zone.** Provisions specifying the boundaries of the SEZ, the concept of using observed false killer whale M&SI in the deep-set longline fishery to trigger a closure in close to real time, and the use of fishing year (i.e., calendar year) cycle instead of “Plan Years” remain the same as originally proposed, though NMFS made minor changes to the description of the boundaries for ease of understanding. The trigger calculation and procedures for opening and closing the SEZ were changed to substantially conform to the recommendations of the Team outlined in the Draft FKWTTRP. Additionally, criteria for reopening the SEZ are specified in regulation, consistent with the Team’s recommendation.

**Classification**

NMFS determined that this action is consistent to the maximum extent practicable with the approved coastal management program of the State of Hawaii. This determination was submitted for review by the responsible state agency under section 307 of the Coastal Zone Management Act (CZMA). A letter from the State of Hawaii Coastal Zone Management Program stating concurrence with NMFS’ CZMA consistency determination was received September 14, 2011.

This final rule does not contain policies with federalism implications as that term is defined in Executive Order 13132.

NMFS prepared a final environmental assessment for this action that discusses the impact on the environment as a result of this final rule. The Preferred Alternative (the final action) is expected to have beneficial effects on false killer whales and other protected species due to potential reductions in interactions and/or injury severity from use of circle hooks with 4.5 mm (0.177 in) wire diameter or less, minimum diameter for monofilament branch line, and closed areas; increased precision of bycatch estimates to better inform management and facilitate adaptive management; and the potential for increased post-interaction survival of entangled or hooked marine mammals due to better training in handling/release, captains’ supervision of interactions, crew notification of captains when a marine mammal is hooked or entangled, and posting of handling/release guidelines on the vessel. Little to no effect on target and non-target species is expected, given current spatial patterns of fishing, likelihood of fishing effort redistribution rather than effort reductions following area closures, the highly migratory nature of the stocks, and existing fishery management measures (e.g., catch limits). No effects to the physical environment, including designated Essential Fish Habitat, Habitat Areas of Particular Concern, Critical Habitat, or physical features are expected. Potential effects to the socioeconomic environment include costs to the regulated community for replacement of fishing gear, increased travel time and fuel costs, increased certification requirements, and potential reduced revenue if area closures result in reduced fishing effort; potential
reductions in revenue and income of fishing gear suppliers due to some gear inventory being unsellable to the Hawaii-based longline fisheries; direct and indirect beneficial quality of life effects on groups that value the false killer whale, particularly scientists and educators and members of the present and future generations of the general public that value marine mammal conservation, with potential benefits to wildlife viewers and to non-longline commercial fisheries or recreational/subsistence fisheries if target fish population abundance rises.

Based on the analysis presented in the final environmental assessment, NMFS determined that the action will not significantly impact the quality of the human environment, and all beneficial and adverse impacts of the action have been addressed to reach the conclusion of no significant impacts. Accordingly, preparation of an environmental impact statement was not necessary. Copies of the final environmental assessment and Finding of No Significant Impact are available on the Team Web site (http://www.nmfs.noaa.gov/pr/interactions/trt/falsekillerwhale.htm), and are available upon request from the Regulatory Branch Chief [see ADDRESSES].

This final rule has been determined to be not significant for the purposes of E.O. 12866.

NMFS prepared a final regulatory flexibility analysis (FRFA), pursuant to section 604 of the Regulatory Flexibility Act (5 U.S.C. 601 et seq.), that describes the economic impact this final rule will have on small entities. The analysis is included as Chapter 6 of the combined Final Environmental Assessment (EA), Regulatory Impact Review (RIR), and FRFA. A description of the need for and objectives of the rule; a summary of significant issues raised by public comments in response to the initial regulatory flexibility analysis (IRFA), summary of the agency’s assessment of such issues, and statement of changes made in the proposed rules as a result of such comments; a description and estimate of the number of small entities to which the rule will apply; a description of the projected reporting, recordkeeping, and other compliance requirements of the rule; and a description of the steps the agency has taken to minimize the economic impact on small entities are included in the FRFA. A summary of the analysis follows. The full analysis is available on the Team Web site or by request from the Regulatory Branch Chief [see ADDRESSES].

Need for and Objectives of the Rule

The action being addressed is the implementation of the FKWTRP, pursuant to section 118(f) of the MMPA, to reduce incidental M&SI of two stocks of false killer whales in the Category I Hawaii-based deep-set longline fishery and the Category II Hawaii-based shallow-set longline fishery. This action is needed because incidental M&SI levels for these stocks in these fisheries exceed the thresholds established under the MMPA. These levels are therefore inconsistent with the mandates of the MMPA, and must be reduced.

Comments on the IRFA and Changes to the Analysis in Response

Four public submissions were received that contained comments on the Draft EA–RIR–IRFA, including comments specific to the IRFA’s analysis of economic impacts to small businesses, as well as comments on impacts analyzed in other sections of the report. These comments are summarized and responded to in Appendix A of the combined Final EA–RIR–FRFA. In general, the comments on the IRFA (i.e., those related to economic impacts to small businesses, see comments 16–18 in Appendix A of the Final EA–RIR–FRFA) requested that NMFS provide a more detailed analysis of impacts of the proposed regulations on small businesses and small vessels. Additionally, the Office of Advocacy at the Small Business Administration requested NMFS identify and provide analysis of alternatives to the rule that could further minimize costs to affected small businesses. In response to these comments, NMFS updated and revised the FRFA analysis with respect to potential profitability impacts on the fleet, especially for those vessels already operating with thin profit margins, and to the potential for varying levels of impacts by vessel size class. NMFS also added a discussion of alternatives to the rule that were considered but rejected.

Directly Regulated Small Entities

The FRFA evaluated impacts of implementation of the final rule (the Preferred Alternative) on small entities. The number of longline vessel operations was identified from the list of Hawaii longline limited access permit holders. The maximum number of active vessels in Hawaii’s longline fleet in the last 5 years is 129. Given that these vessels are owned by 88 individuals, it is assumed based on available data that the fleet is made up of 86 independently-owned businesses. There is only one business with 14 vessels that may not meet the criteria of a small business. Therefore, the analysis identifies 87 small businesses that are anticipated to be directly regulated by the alternatives considered. Of these small businesses identified, 68 businesses own 1 vessel each, 15 businesses own 2 vessels each, 2 businesses own 3 vessels each, 1 business owns 5 vessels, and 1 business owns 6 vessels. For the purpose of this analysis, it is assumed that all these small business are associated with the deep-set longline fishery.

Estimated Impacts to Small Entities

The Preferred Alternative is not expected to generate benefits to the small businesses in the longline fishery, since it would further restrict the location of longline fishing and require the use of specific gear, additional training, and response to marine mammal interactions.

Costs associated with the Preferred Alternative stem from labor and material costs of replacing hooks and monofilament branch lines; additional travel costs (fuel and time) of fishing outside the MHI longline exclusion zone during the time it is currently open to longline fishing and outside the SEZ if the closure is triggered; annual cost of Protected Species Workshop certification of operators and owners; and/or potential reduced revenue due to reduced catch or fishing effort. Initial, one-time costs would be expected to range from $3,000 to $5,000 per business for the 68 businesses owning 1 vessel each, to $17,000–$28,000 for the single business owning 6 vessels. Annual ongoing costs would be expected to range from $700 to $32,000 per business for the 68 businesses owning 1 vessel each, to $4,000–$190,000 for the single business owning 6 vessels. Cost per business for the small number of vessels owning between 2 and 5 vessels would be expected to fall within the ranges identified above. Average annual ongoing costs vary considerably depending on the duration of a potential Southern Exclusion Zone closure. Individual business costs may be higher or lower than the range described here depending on several factors, particularly (1) location of current longline fishing trips (if a vessel currently fishes in an area that will be closed by the FKWTRP, costs will be higher for that vessel), and (2) current gear use (if a vessel would need to change hooks or branch line to meet the Preferred Alternative’s gear requirements, costs will be higher for that vessel).

The effects of the Preferred Alternative on small businesses will depend on the profitability of these
businesses, which is difficult to quantify due to uncertainty and volatility in revenue and cost structure over time, as well as uncertainty regarding the actual costs of the FKWTRP, particularly if the SEZ area closure was triggered. Recent profit data are not available, but it is likely that the overall profitability has decreased since 2000 due to rising operating costs (O’Malley and Pooley, 2003). Data from 2000 also suggest that profitability in the fleet varies by vessel size, and that owners of small vessels may already be marginally profitable. Those vessels could be most affected by the potential increased costs of the Preferred Alternative.

Projected Reporting, Recordkeeping, and Other Compliance Requirements of the Rule

No additional reporting, recordkeeping, and other compliance requirements are anticipated for the affected small businesses as a result of the rule.

Evaluation of Significant Alternatives to the Rule and Steps Taken To Minimize Economic Impacts on Small Entities

In addition to the Preferred Alternative, the FRFA formally considered two other alternatives. Implementation of a “No Action” alternative is not a viable option because it would not be consistent with the objectives of the action and would be contrary to MMPA requirements to reduce false killer whale M&SI to appropriate levels. Alternative 2 would close the U.S. EEZ around Hawaii to longline fishing year-round.

The complete closure of the U.S. EEZ around Hawaii to longline fishing under Alternative 2 would be expected to incur more significant overall annual costs to small businesses, although no one-time capital costs are anticipated. These costs are associated with the opportunity cost of increased travel time to fishing grounds outside of the U.S. EEZ, and additional fuel costs for that travel. Annual ongoing costs associated with implementing Alternative 3 range from $74,000 to $88,000 per business for the 68 businesses owning 1 vessel each, to $443,000–$527,000 for the single business owning 6 vessels. Cost per vessel for the small number of vessels owning between 2 and 5 vessels would be expected to fall within the ranges identified above.

NMFS also considered alternatives that could further minimize economic costs to the affected small businesses while still achieving MMPA objectives. These focused on alternatives to, or variations of, the measures in the Preferred Alternative that have the largest potential costs to the longline industry: the weak circle hook requirements and the Southern Exclusion Zone. Specifically, NMFS considered a range of implementation timetables for implementation of the weak circle hook requirement, ranging from one month to six months. Although a six-month implementation timeline for the circle hook requirement, either for all longline vessels or for a particular size class of vessels, may allow a minimal cost savings for those vessels, NMFS rejected this alternative because it would likely impede achievement of the MMPA’s goal of reducing M&SI below PBR within 6 months of Plan implementation. The Preferred Alternative specifies an intermediate 90-day timetable that will allow gear suppliers to acquire a sufficient supply of hooks and fishermen to change over their gear, and still implement the measure in time to demonstrate effectiveness. It may result in a small cost savings to fishermen compared to an immediate implementation of the requirement. Accordingly, NMFS concludes that the 90-day implementation period appropriately minimizes the rule’s burden on small entities while still achieving MMPA objectives.

NMFS also considered alternative implementation of the SEZ measures that would have separate triggers or closures for vessels of different size classes. NMFS rejected these alternatives mainly because the sustainable bycatch threshold (PBR) for Hawaii Pelagic false killer whales is so low that it would be impracticable to further apportion the trigger among different sectors of the fleet, by vessel size or any other characteristic. Similarly, NMFS cannot consider an exemption from the SEZ closure for small vessels, given the low PBR level and the equal probability that a vessel of any size may incidentally injure or kill a false killer whale.

After careful examination of the best available scientific data on false killer whales, NMFS finds that only the Preferred Alternative and Alternative 3 had the potential to meet the stated objectives of the Take Reduction Plan, consistent with MMPA requirements. Alternative 2 was not selected because it would impose substantially greater economic impacts to small entities than the Preferred Alternative, and it has not been determined to be necessary to achieve MMPA objectives. NMFS believes that implementation of the Preferred Alternative will achieve the requirements of the MMPA while minimizing economic impacts to small businesses to the extent practicable.

References Cited

A list of all references cited in this final rule may be found on the Team Web site (http://www.nmfs.noaa.gov/pr/interactions/trt/falsekillerwhale.htm), and is available upon request from the Regulatory Branch Chief (see ADDRESSES).

List of Subjects

50 CFR Part 229

Administrative practice and procedure, Fisheries, Marine mammals.

50 CFR Part 665

Administrative practice and procedure, Fisheries, Hawaii, Longline, Marine mammals.

For the reasons set out in the preamble, 50 CFR chapters II and VI are amended as follows:

50 CFR CHAPTER II

PART 229—AUTHORIZATION FOR COMMERCIAL FISHERIES UNDER THE MARINE MAMMAL PROTECTION ACT OF 1972

1. The authority citation for part 229 continues to read as follows:

Authority: 16 U.S.C. 1361 et seq.

2. In §229.3, effective December 31, 2012, add and reserve paragraph (v), and add new paragraphs (w) through (y) to read as follows:

§229.3 Prohibitions.

(v) [Reserved]

(w) It is prohibited to fish with longline gear in the Main Hawaiian Islands Longline Fishing Prohibited Area, as defined in §229.37(d)(1).

(x) It is prohibited to deep-set in the Southern Exclusion Zone, as defined in §229.37(d)(2), during the time the area is closed to deep-set longline fishing pursuant to §229.37(e).

(y) It is prohibited to fish with longline gear from a vessel registered for use under a Hawaii longline limited access permit in violation of the marine mammal handling and release requirements at §229.37(f).

3. In §229.3, effective February 27, 2013, add new paragraph (v) to read as follows:

§229.3 Prohibitions.

(v) It is prohibited to deep-set from a vessel registered for use under a Hawaii longline limited access permit unless the vessel complies with the gear requirements specified in §229.37(c)(1) and (c)(2).
§ 229.37 False Killer Whale Take Reduction Plan.

(a) Purpose and scope. The purpose of this section is to implement the False Killer Whale Take Reduction Plan to reduce mortality and serious injury of the Hawaii Pelagic and Hawaii Insular stocks of false killer whales in the Hawaii-based deep-set and shallow-water pelagic longline fisheries. The requirements in this section apply to vessel owners and operators, and vessels registered for use with Hawaii longline limited access permits issued under § 665.801(b) of this title.

(b) Definitions. In addition to the definitions contained in § 229.2, terms in this section have the following meanings:

(1) Deep-set or Deep-setting has the same meaning as the definition at § 665.800 of this title.

(2) Longline gear has the same meaning as the definition at § 665.800 of this title.

(c) [Reserved]

(d) Prohibited area management. (1) Main Hawaiian Islands Longline Fishing Prohibited Area. Longline fishing is prohibited in the portion of the EEZ around Hawaii bounded by straight lines connecting the following coordinates in the order listed:

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(2) Southern Exclusion Zone. Deep-set longline fishing is prohibited in the Southern Exclusion Zone when the zone is closed to protect false killer whales pursuant to the procedures outlined in paragraph (e) of this section. The Southern Exclusion Zone is the portion of the EEZ around Hawaii bounded by 165°00'W. longitude on the west, 154°30'W. longitude on the east, the Papahanaumokua kea Marine National Monument and the Main Hawaiian Islands Longline Fishing Prohibited Area on the north, and the EEZ boundary on the south.

(e) Southern Exclusion Zone trigger and procedures. (1) The Assistant Administrator will publish in the Federal Register the expected observer coverage for a fishing year, the potential biological removal level for the Hawaii Pelagic stock of false killer whales, and the associated trigger calculated using the specifications in paragraph (e)(2) of this section. This trigger will remain in effect until superseded by publication of a revised trigger.

(2) As used in this section, trigger means the number of observed false killer whale mortalities or serious injuries in the deep-set longline fishery that occur in the EEZ around Hawaii, and that serves as the bycatch threshold for closing the Southern Exclusion Zone to deep-set longline fishing. The trigger is calculated as the larger of the following:

(i) Two; or

(ii) The smallest number of observed false killer whale mortalities or serious injuries that, when extrapolated based on the percentage observer coverage in the deep-set longline fishery for that year, exceeds the Hawaii Pelagic false killer whale stock’s potential biological removal level.

(3) Unless otherwise subject to paragraph (e)(4) of this section, if there is an observed false killer whale mortality or serious injury in the EEZ around Hawaii on a declared deep-set longline trip that meets the established trigger for a given fishing year, the Southern Exclusion Zone will be closed to deep-set longline fishing until the end of that fishing year.

(4) If during the same calendar year following closure of the Southern Exclusion Zone in accordance with paragraph (e)(3) of this section, there is one observed false killer whale mortality or serious injury on a declared deep-set longline trip anywhere in the EEZ around Hawaii, then NMFS shall immediately convene the False Killer Whale Take Reduction Team.

(5) If in the subsequent calendar year following closure of the Southern Exclusion Zone in accordance with paragraph (e)(3) of this section, there is an observed false killer whale mortality or serious injury in the EEZ around Hawaii on a declared deep-set longline trip that meets the established trigger for a given fishing year, the Southern Exclusion Zone will be closed to deep-set longline fishing until the area is reopened by the Assistant Administrator as per criteria in paragraph (e)(7) of this section.

(6) Upon determining that reopening the Southern Exclusion Zone is warranted pursuant to the procedures in paragraph (e)(5) of this section, the Assistant Administrator will provide notice to Hawaii longline permit holders and the False Killer Whale Take Reduction Team, publish a notice in the Federal Register, and post information on the NMFS Pacific Islands Regional Office web site. The notice will announce that the fishery will be closed at a specified date, which is not earlier than 7 days and not later than 15 days, after the date of filing the closure notice for public inspection at the Office of the Federal Register.

(7) Reopening criteria. If the Southern Exclusion Zone is closed pursuant to the procedure in paragraphs (e)(1) through (e)(6) of this section, the Assistant Administrator would reopen the Southern Exclusion Zone if one or more of the follow criteria were met:

(i) The Assistant Administrator determines, upon consideration of the False Killer Whale Take Reduction Team’s recommendations and evaluation of all relevant circumstances, that reopening the Southern Exclusion Zone is warranted;

(ii) In the 2-year period immediately following the date of the Southern Exclusion Zone closure, the deep-set longline fishery has zero observed false killer whale incidental mortalities and serious injuries within the remaining open areas of the EEZ around Hawaii; and

(iii) In the 2-year period immediately following the date of the closure, the deep-set longline fishery has reduced its total rate of false killer whale incidental mortality and serious injury (including the EEZ around Hawaii, the high seas, and the EEZ around Johnston Atoll) to below the average level; or

(iv) The average estimated level of false killer whale incidental mortality and serious injury in the deep-set longline fishery within the remaining open areas of the EEZ around Hawaii for up to the 5 most recent years is below the potential biological removal level for the Hawaii Pelagic stock of false killer whales that at that time.

(8) Upon determining that reopening the Southern Exclusion Zone is warranted pursuant to the procedures in paragraph (e)(7) of this section, the Assistant Administrator will provide notice to Hawaii longline permit holders and the False Killer Whale Take Reduction Team, publish a notice in the Federal Register, and post information on the NMFS Pacific Islands Regional Office web site. The notice will announce that the fishery will be...
reopened beginning at a specified date, which is not earlier than 7 days and not later than 15 days, after the date of filing the closure notice for public inspection at the Office of the Federal Register.

(f) Marine mammal handling and release. (1) Each year, both the owner and the operator of a vessel registered for use with a longline permit issued under §665.801 of this title must attend and be certified for completion of a workshop conducted by NMFS on interaction mitigation techniques for sea turtles, seabirds, and marine mammals, as required under §665.814 of this title.

(2) Longline vessel operators (captains) must supervise and be in visual and/or verbal contact with the crew during any handling or release of marine mammals.

(3) A NMFS-approved placard setting forth marine mammal handling and/or release procedures must be posted on the longline vessel in a conspicuous place that is regularly accessible and visible to the crew.

(4) A NMFS-approved placard instructing vessel crew to notify the captain in the event of a marine mammal interaction must be posted on the longline vessel in a conspicuous place that is regularly accessible and visible to the crew.

5. Effective February 27, 2013, add a new paragraph (c) to §229.37 to read as follows:

§229.37 False Killer Whale Take Reduction Plan.

(c) Gear requirements. (1) While deep-setting, the owner and operator of a vessel registered for use under a Hawaii longline limited access permit must use only hooks meeting the following specifications:

(i) Circle hook with hook shank containing round wire that can be measured with a caliper or other appropriate gauge, with a wire diameter not to exceed 4.5 mm (0.177 in); and

(ii) Offset not to exceed 10 degrees.

(2) While deep-setting, owners and operators of vessels registered for use under a valid Hawaii longline limited access permit must use leaders and branch lines that all have a diameter of 2.0 mm or larger if the leaders and branch lines are made of monofilament nylon. If any other material is used for a leader or branch line, that material must have a breaking strength of at least 400 lb (181 kg).

§665.806 Prohibited area management.

(a) * * *

(2) Main Hawaiian Islands (MHI). The MHI longline fishing prohibited area is the portion of the EEZ around Hawaii bounded by straight lines connecting the following coordinated in the order listed:

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Alan Risenhoover,
Director, Office of Sustainable Fisheries, performing the functions and duties of the Deputy Assistant Administrator for Regulatory Programs, National Marine Fisheries Service.

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