

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Parts 229 and 665

[Docket No. 110131070-1084-01]

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: Proposed rule; notice of availability of draft take reduction plan; request for
comments.

SUMMARY: NMFS announces the availability of a Draft False Killer Whale Take Reduction
Plan developed by the False Killer Whale Take Reduction Team. This proposed rule would
implement the proposed False Killer Whale Take Reduction Plan (FKWTRP), which is based on
consensus recommendations included in the Draft False Killer Whale Take Reduction Plan. The
proposed FKWTRP includes some changes and modifications proposed by NMFS. This action
is necessary because current mortality and serious injury of the Hawaii Pelagic stock of false
killer whales incidental to the Hawaii-based pelagic longline fisheries are above the stock's
potential biological removal (PBR), 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 through both regulatory and non-regulatory measures. Proposed
regulatory measures include gear requirements, longline prohibited areas, training and

certification in marine mammal handling and release, captains' supervision of marine mammal handling and release, and posting of NMFS-approved placards on longline vessels. NMFS is also proposing non-regulatory measures, including research and data collection recommendations.

DATES: Written comments on the proposed rule must be received no later [INSERT DATE 90 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: Comments on the proposed rule, identified by 0648-BA30, may be sent to either of the following addresses:

- Electronic Submissions: Submit all electronic public comments via the Federal eRulemaking Portal: <http://www.regulations.gov>; or.
- Mail: Mail written comments to Regulatory Branch Chief, Protected Resources Division, National Marine Fisheries Service, Pacific Islands Regional Office (PIR), 1601 Kapiolani Blvd., Suite 1110, Honolulu, HI 96814, Attn: Proposed False Killer Whale Take Reduction Plan.

Instructions: Comments must be submitted to one of these two addresses to ensure that the comments are received, documented, and considered by NMFS. Comments sent to any other address or individual, or received after the end of the comment period, may not be considered.

All comments received are a part of the public record and will generally be posted to www.regulations.gov without change. All personal identifying information (e.g., name, address, etc.) voluntarily submitted by the commenter may be publicly accessible. Do not submit confidential business information, or otherwise sensitive or protected information. NMFS will accept anonymous comments (enter "N/A" in the required fields if you wish to remain

anonymous). You may submit attachments to electronic comments in Microsoft Word, Excel, WordPerfect, or Adobe PDF file formats only.

This proposed rule (the proposed False Killer Whale Take Reduction Plan), the recommendations submitted by the False Killer Whale Take Reduction Team (FKWTRT) (the Draft False Killer Whale Take Reduction Plan), references, and other background documents are available at www.regulations.gov, or the Take Reduction Team web site:

www.nmfs.noaa.gov/pr/interactions/tr/falsekillerwhale.htm, or by submitting a request to the Regulatory Branch Chief [see ADDRESSES].

FOR FURTHER INFORMATION CONTACT: Nancy Young, NMFS PIR, Nancy.Young@noaa.gov, 808-944-2282; Lance Smith, NMFS PIR, Lance.Smith@noaa.gov, 808-944-2258; or Kristy Long, NMFS Office of Protected Resources, Kristy.Long@noaa.gov, 301-713-2322.

SUPPLEMENTARY INFORMATION:

Summary

The proposed False Killer Whale Take Reduction Plan (FKWTRP) is intended to meet the statutory mandates and requirements of the Marine Mammal Protection Act (MMPA, 16 U.S.C. 1362 *et seq.*) through both regulatory measures and non-regulatory components, including research and data collection priorities. The proposed regulatory measures include: hook and branchline requirements for the deep-set longline fishery; modification of an existing longline prohibited area around the Main Hawaiian Islands; a new longline prohibited area that would be closed to deep-set longline fishing only when triggered by a specified level of false killer whale mortalities or serious injuries; expanded content of the existing, mandatory Protected Species Workshop for Hawaii-based longline fisheries to include new information on

marine mammal interaction mitigation techniques certification; a requirement for longline vessel captains to supervise the handling and release of hooked or entangled marine mammals; and required posting of NMFS-approved placards on longline vessels. Proposed non-regulatory measures, the implementation of which would be NMFS' responsibility, include: increasing the precision of bycatch estimates in the deep-set longline fishery; notifying the False Killer Whale Take Reduction Team (FWKTRT) when there is an observed interaction of a known or possible false killer whale; expediting the process for confirming the species identification of animals involved in such interactions and for making serious injury determinations; specifying changes to the observer training and data collection protocols; expedited processing of data from NMFS' 2010 survey of the Hawaiian Islands to obtain updated marine mammal abundance estimates; and reconvening the FWKTRT at regular intervals. The proposed FKWTRP also includes prioritized research recommendations to better inform long-term solutions for reducing false killer whale mortalities and serious injuries. More details on the proposed measures may be found in the sections "Proposed Regulatory Measures," "Proposed Non-Regulatory Measures," and "Additional Research and Data Collection" below.

Bycatch Reduction Requirements in the MMPA

Section 118(c)(1) of the MMPA requires NMFS to classify all U.S. commercial fisheries according to the level of serious injury and mortality (death) of marine mammals that occurs incidental to each fishery. NMFS reviews and revises these classifications each year, and publishes the annual MMPA List of Fisheries in the Federal Register. The MMPA and implementing regulations (50 CFR 229.2) define three categories of fisheries: Category I, II, and III fisheries as those that, respectively, have frequent, occasional, or a remote likelihood of or no known incidental mortality or serious injury (M&SI) of marine mammals. NMFS has also

established numerical definitions of these three categories that quantify each fishery's effects on individual marine mammal stocks.

Section 118(f)(1) of the Marine Mammal Protection Act (MMPA) requires NMFS to develop and implement take reduction plans to assist in the recovery or prevent the depletion of each strategic marine mammal stock that interacts with Category I and II fisheries. Category I and II fisheries are fisheries that have frequent or occasional incidental M&SI of marine mammals, respectively. Section 118(f)(1) also provides NMFS discretion to develop and implement a take reduction plan for any other marine mammal stocks that interact with a Category I fishery, which the agency determines, after notice and opportunity for public comment, has a high level of M&SI across a number of such marine mammal stocks.

The MMPA defines a strategic stock as a marine mammal stock: (1) for which the level of direct human-caused mortality exceeds a sustainability threshold called the "potential biological removal" (PBR) level; (2) which is declining and likely to be listed under the Endangered Species Act (ESA) in the foreseeable future; or (3) which is listed as threatened or endangered under the ESA or as a depleted species under the MMPA. 16 U.S.C. § 1362(2). PBR is the maximum number of animals, not including natural deaths, that can be removed annually from a stock, while allowing that stock to reach or maintain its optimum sustainable population level.

The immediate goal of a take reduction plan for a strategic stock is to reduce, within six months of its implementation, the incidental M&SI of marine mammals from commercial fishing to levels less than the PBR level established for that stock. The long-term goal is to reduce, within five years of its implementation, the incidental M&SI of marine mammals from commercial fishing operations to insignificant levels approaching a zero M&SI rate (which

NMFS has defined in regulations as 10 percent of the PBR for a stock of marine mammals, 50 CFR 229.2), taking into account the economics of the fishery, the availability of existing technology, and existing state or regional fishery management plans.

Scope of the Plan

Commercial Fisheries

The proposed FKWTRP addresses incidental M&SI of false killer whales (Pseudorca crassidens) in the Category I Hawaii-based deep-set longline fishery (defined on the List of Fisheries as the “HI deep-set (tuna target) longline/set line” and “Western Pacific Pelagic (Deep-set component)” fisheries), and the Category II Hawaii-based shallow-set longline fishery (defined on the List of Fisheries as the “HI shallow-set (swordfish target) longline/set line” and “Western Pacific Pelagic Shallow-set component” fisheries). These fisheries operate in both U.S. waters and on the high seas. In the List of Fisheries, the high seas components of the fisheries are not considered separate fisheries, but as extensions of the fisheries operating within U.S. waters. The proposed FKWTRP also considers potential impacts to marine mammal stocks from the Hawaii shortline and kaka line fisheries; however, because information concerning actual impacts is currently undeveloped, NMFS is not proposing regulations for these fisheries in this proposed rule.

Marine Mammal Species and Stocks

The proposed FKWTRP is primarily focused on fishery impacts on the Hawaii Pelagic stock of false killer whales. Two additional stocks of false killer whales in the Pacific Islands Region, the Hawaii Insular and Palmyra Atoll stocks, are also addressed. The Hawaii Pelagic stock of false killer whales is the only strategic stock, as of the final 2010 Stock Assessment

Report (SAR) (Carretta et al., 2011), but all three are known or have potential to interact with the Category I Hawaii-based deep-set longline fishery.

One additional stock of false killer whales in the Pacific Islands Region, the American Samoa stock, was newly defined in the 2010 SAR, but no abundance estimate or PBR level is currently available for this stock (Carretta et al., 2011). NMFS has some information from the NMFS Pacific Islands Regional Office (PIRO) Observer Program (PIROP) on the level of M&SI occurring incidental to the American Samoa longline fishery, but without a PBR, NMFS has insufficient information to determine whether the level of incidental M&SI is sustainable. This proposed FKWTRP does not address bycatch of false killer whales in American Samoa; instead, it focuses on the incidental M&SI of false killer whale stocks that interact with fisheries known to have unsustainable levels of bycatch of this species. However, NMFS will continue to evaluate incidental interaction rates in the American Samoa longline fishery as observer coverage in this fishery increases, and will consider additional conservation and management measures if warranted by the information developed.

The 2011 MMPA List of Fisheries (75 FR 68468, November 8, 2010) identifies several other species or stocks of marine mammals that have been observed as injured or killed incidental to the Hawaii-based deep-set and shallow-set fisheries, including: Blainville's beaked whale, Hawaii stock (Mesoplodon densirostris); bottlenose dolphin, Hawaii Pelagic stock (Tursiops truncatus); humpback whale, Central North Pacific (CNP) stock (Megaptera novaeangliae); pantropical spotted dolphin, Hawaii stock (Stenella attenuata); Risso's dolphin, Hawaii stock (Grampus griseus); short-finned pilot whale, Hawaii stock (Globicephala macrorhynchus); striped dolphin, Hawaii stock (Stenella coeruleoalba); Bryde's whale, Hawaii stock (Balaenoptera edeni); Kogia spp. whale (Pygmy sperm whale (Kogia breviceps) or dwarf

sperm whale (*Kogia sima*); Hawaii stock). With the exception of humpback whales, the incidental M&SI of all of these stocks is at or below the insignificance threshold (i.e., 10 percent of PBR), and are not addressed in this proposed rule. The CNP stock of humpback whales, although a strategic stock because of its endangered status, is not designated as “strategic” because of fishery interactions, and NMFS has determined that incidental taking from commercial fishing will have a negligible impact on CNP humpback whales (75 FR 29984, May 28, 2010). For these reasons, the proposed FKWTRP also does not address incidental M&SI of humpback whales.

Goals of the FKWTRP

The Hawaii Pelagic stock is the only stock of false killer whales in the Pacific Islands Region for which M&SI incidental to the Hawaii-based longline fisheries is known to exceed the stock’s PBR level, as of the final 2010 SAR (Carretta et al., 2011). The short-term goal of the proposed FKWTRP is to reduce, within six months of its implementation, M&SI of the Hawaii Pelagic stock of false killer whales incidental to the Hawaii-based longline fisheries occurring within the U.S. Exclusive Economic Zone (EEZ) around the Hawaiian Islands to less than the stock’s PBR level of 2.5 false killer whales per year (Carretta et al., 2011).

The Hawaii Pelagic stock is a transboundary stock that inhabits waters both within and outside of the 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 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 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 reduce the uncertainties regarding impacts of false killer whale incidental takes on the high seas, but these

uncertainties do not affect the Hawaii Pelagic false killer whale stock's designation as strategic. 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 EEZ to the high seas, NMFS is requiring that incidental M&SI of the high seas component of the Hawaii Pelagic stock not increase above current levels (i.e., 5.3 false killer whales per year, as of the 2010 SAR, Carretta et al., 2011).

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, Hawaii Insular, and Palmyra Atoll stocks of false killer whales to insignificant levels (i.e., less than 10 percent of their respective PBR levels).

History of the FKWTRT

NMFS established the FKWTRT on January 19, 2010 (75 FR 2853), and selected team members according to guidance provided in MMPA section 118(f)(6)(C). NMFS strove to select an experienced and committed team with a balanced representation of stakeholders. Members of the FKWTRT included representatives of the Hawaii-based deep-set and shallow-set longline fisheries, conservation organizations, scientific and research organizations, the State of Hawaii, the Marine Mammal Commission, the Western Pacific Fishery Management Council, and NMFS.

Four professionally-facilitated meetings were held between February 2010 and July 2010. During these meetings, NMFS presented false killer whale abundance and incidental M&SI estimates, characterization and regulatory structure of the Hawaii-based longline fisheries, and analysis of observer, logbook, and other fisheries data. In addition, NMFS, in consultation with the FKWTRT, performed and presented analyses of observer data to identify variables that may

be predictors of depredation by cetaceans or bycatch of false killer whales. NMFS also developed a model to perform predictive simulations to evaluate potential mitigation strategies. Each meeting included facilitated discussions to examine the findings of the analyses, and to develop and draft various components of a Draft FKWTRP, with an emphasis on management and research recommendations.

The FKWTRT reached consensus at the July 2010 meeting, and on July 19, 2010, submitted to NMFS a Draft FKWTRP including recommendations for regulatory bycatch reduction measures, as well as research needs and other non-regulatory measures (FKWTRT, 2010). The team's consensus recommendations formed the basis of this proposed FKWTRP.

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 a total of six stranding records from Hawaiian waters (Nitta, 1991; Maldini, 2005). One on-effort sighting of false killer whales was made during a NMFS 2002 shipboard survey of waters within the EEZ around Hawaii (Barlow, 2006). Smaller-scale surveys conducted around the Main Hawaiian Islands (MHI) show that false killer whales are also encountered in nearshore waters (Baird et al., 2008; Mobley et al., 2000). This species also occurs in the EEZ around Palmyra Atoll, Johnston Atoll, and American Samoa (Barlow and Rankin, 2007; Carretta et al., 2011).

Genetic analyses of tissue samples collected within the Indo-Pacific indicate restricted gene flow between false killer whales sampled near the MHI and false killer whales sampled in all other regions (Chivers et al., 2007; 2010). The recent update from Chivers et al. (2010) included additional samples and analysis of eight nuclear DNA (nDNA) microsatellites,

revealing strong phylogenetic patterns that are consistent with local evolution of haplotypes that are nearly unique to the separate insular population around the MHI. Further, the recent analysis also revealed significant differentiation, both in mitochondrial and nDNA, between pelagic false killer whales in the Eastern North Pacific (ENP) and Central North Pacific (CNP) strata defined in Chivers et al. (2010), though the sample distribution to the east and west of Hawaii is insufficient to determine whether the sampled strata represent one or more stocks, and where stock boundaries would be. Since 2003, NMFS observers have been collecting tissue samples of bycaught cetaceans in the Hawaii-based longline fisheries for genetic analysis whenever possible. Between 2003 and 2010, eight false killer whale samples (four collected outside the EEZ around Hawaii and four collected within the EEZ but more than 100 nautical miles (nm) (185 km) from the MHI) were determined to have Pacific pelagic haplotypes (Chivers et al., 2010).

Recent satellite telemetry studies, boat-based surveys, and photo-identification analyses of false killer whales around Hawaii have demonstrated that the insular and pelagic stocks have overlapping ranges, rather than a clear separation in distribution. Hawaii Insular false killer whales have been documented as far as 112 km (60 nm) from the MHI, and Hawaii Pelagic stock animals have been documented as close as 42 km (23 nm) to the islands (Baird et al., 2008; Baird, 2009; Baird et al., 2010; Forney et al., 2010). Based on a review of new information (Forney et al., 2010), the 2010 SAR recognizes a new, overlapping distribution for Hawaii Insular and Hawaii Pelagic stocks of false killer whales around Hawaii: unless stock identity can be confirmed through other evidence (e.g., genetic data), animals within 40 km (22 nm) of the MHI are considered part of the Hawaii Insular stock; animals beyond 140 km (76 nm) of the MHI are considered part of the Hawaii Pelagic stock, and the two stocks overlap between 40 km

(22 nm) and 140 km (76 nm) from shore (Carretta et al., 2011).

The 2010 SAR also clarifies that the Hawaii Pelagic stock includes animals found both within the EEZ around Hawaii and in adjacent high seas; however, because data on false killer whale abundance, distribution, and human-caused impacts are largely lacking for the high seas, the status of this stock is evaluated based on data from the EEZ around Hawaii (Carretta et al., 2011; NMFS, 2005a). The Palmyra Atoll stock of false killer whales remains a separate stock, because comparisons amongst false killer whales sampled at Palmyra Atoll and those sampled from the Hawaii Insular stock and the pelagic ENP revealed restricted gene flow, although the sample size remains low for robust comparisons (Chivers et al., 2007; 2010). NMFS will continue to obtain and analyze additional tissue samples for genetic studies of stock structure, and will evaluate new information on stock ranges as it becomes available.

In the 2010 SAR, there are four 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 Hawaii Pelagic stock, which includes false killer whales inhabiting waters greater than 40 km (22 nm) from the MHI; (3) the Palmyra Atoll stock, which includes false killer whales found within the EEZ around Palmyra Atoll; and (4) the American Samoa stock, which includes false killer whales found within the EEZ around American Samoa (Carretta et al., 2011). The American Samoa stock was not included in the scope of the FKWTRT's discussions, and is not described further in this proposed FKWTRP.

Abundance Estimates and Potential Biological Removal Levels

Hawaii Insular Stock of False Killer Whales

A mark-recapture study of photo-identification data obtained during 2000-2004 around the MHI produced an estimate of 123 Hawaii Insular false killer whales (coefficient of variation,

or $CV=0.72$; the CV is a measurement of the variation in the data, and is calculated as the ratio of the standard deviation to the mean) (Carretta et al., 2011; Baird et al., 2005). The minimum population estimate for the Hawaii Insular stock of false killer whales is the number of distinct individuals identified in this population during the 2002-2004 photo-identification studies, that is, 76 individual whales (Baird et al., 2005). This is similar to the log-normal 20th percentile of the mark-recapture abundance estimate, 71 false killer whales. A recent study (Baird, 2009) summarized information on false killer whale sightings near Hawaii between 1989 and 2007, based on various survey methods, and provided evidence that the Hawaii Insular stock of false killer whales may have declined during the last two decades. Evidence of a decline is also supported by a recent genetic study that indicates there has been a decline in the effective population size (Chivers et al., 2010). No data are available on current or maximum net productivity rate for this stock.

PBR is defined 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 (76) times one half the default maximum net growth rate for cetaceans (one half of 4 percent) times a recovery factor of 0.40 (for a stock of unknown status with a human-caused M&SI rate $CV>0.80$; see Wade and Angliss, 1997), resulting in a PBR of 0.61 false killer whales per year, as of the 2010 SAR (Carretta et al., 2011).

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). A final listing decision is expected by November 2011.

HI Pelagic Stock of False Killer Whales

Analyses of a NMFS 2002 shipboard line-transect survey of the EEZ around Hawaii (Hawaiian Islands Cetacean and Ecosystem Assessment Survey, or HICEAS) resulted in an abundance estimate of 236 (CV=1.13) false killer whales (Barlow 2006) outside of 75 nm (139 km) of the MHI. A recent re-analysis of the HICEAS data using improved methods and incorporating additional sighting information obtained on line-transect surveys south of the EEZ around Hawaii during 2005, resulted in a revised estimate of 484 (CV = 0.93) false killer whales within the EEZ around Hawaii outside of about 75 nm (139 km) of the MHI (Barlow and Rankin, 2007). This is the best available abundance estimate for the Hawaii Pelagic stock of false killer whales. The 2005 survey (Barlow and Rankin, 2007) also resulted in a separate abundance estimate of 906 (CV=0.68) false killer whales in international waters south of the EEZ around Hawaii and within the 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 2002 abundance estimate for the EEZ around Hawaii outside of 75 nm (139 km) from the MHI (Barlow and Rankin, 2007) is 249 false killer whales. 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 EEZ around Hawaii because abundance estimates and estimates of human-caused M&SI from all U.S. and non-U.S. sources are not available in the high seas where this stock may also occur. The PBR level for the Hawaii Pelagic stock of false killer whale is thus calculated as the minimum population size within the EEZ around Hawaii (249) times one half the default maximum net growth rate for cetaceans (one half of 4 percent) times a recovery factor of 0.50 (for a stock of unknown status with a M&SI rate in

the EEZ around Hawaii $CV \leq 0.30$; Wade and Angliss, 1997), resulting in a PBR of 2.5 false killer whales per year, as of the 2010 SAR (Carretta et al., 2011).

Palmyra Atoll Stock of False Killer Whales

Recent line transect surveys in the EEZ around Palmyra Atoll produced an estimate of 1,329 ($CV = 0.65$) false killer whales (Barlow and Rankin, 2007). This is the best available abundance estimate for false killer whales within the EEZ around Palmyra Atoll. The log-normal 20th percentile of the 2002 abundance estimate for the EEZ around Palmyra Atoll (Barlow and Rankin, 2007) is 806 false killer whales. No data are available on current population trend or on current or maximum net productivity rate for this stock.

The PBR level for the Palmyra Atoll false killer whale stock is calculated as the minimum population size (806) times one half the default maximum net growth rate for cetaceans (one half of 4 percent) times a recovery factor of 0.40 (for a stock of unknown status with a M&SI rate $CV > 0.80$; Wade and Angliss, 1997), resulting in a PBR of 6.4 false killer whales per year, as of the 2010 SAR (Carretta et al., 2011).

Mortality and Serious Injury Estimates

The total incidental M&SI of cetaceans in the shallow-set longline fishery (with 100 percent observer coverage) and the estimated annual and 5-year average incidental M&SI of cetaceans in the deep-set longline fishery are reported by McCracken and Forney (2010). Their methodology includes prorating all estimated incidental takes of false killer whales based on the proportions of observed interactions that resulted in death or serious injury (89 percent), or non-serious injury (11 percent). Further, incidental takes of false killer whales of unknown stock origin within the Hawaii Insular/Pelagic stock overlap zone are prorated based on the density of each stock in that area, as recommended in the NMFS GAMMS (NMFS, 2005a) and by the

Pacific Scientific Review Group. No genetic samples are available to establish stock identity for these incidental takes, but both stocks are considered by NMFS to be at risk of interacting with longline gear within this region. Until methods of determining stock identity for animals observed incidentally taken within the overlap zone are available (e.g., photos, tissue samples), this proration approach produces the best available method for accounting for potential impacts to both stocks.

Based on these bycatch analyses, estimates of annual and 5-year average annual incidental M&SI of false killer whales, by stock and EEZ area, are presented in the 2010 SAR (Carretta et al., 2011). Using data from 2004-2008, the mean estimated annual incidental M&SI of false killer whales in the Hawaii Pelagic stock occurring outside of the EEZ was 5.3 (CV = 0.5) and inside the EEZ around Hawaii was 7.3 (CV = 0.3). The mean estimated annual incidental M&SI of false killer whales in the Hawaii Insular stock was 0.60 (CV = 1.3) and 0.3 (CV = 1.3) for the Palmyra Atoll stock (Carretta et al., 2011). These estimates of incidental M&SI do not include any unidentified animals (8 observed animals) that may have been false killer whales, and, therefore, are minimum estimates. Efforts are currently underway to develop methods of prorating the unidentified animals by species and stock, taking into account geographic differences in their ranges and observed rates of documented interactions with each species; these estimates will likely be included in the draft 2011 SAR.

Components of the Proposed FKWTRP

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

NMFS believes the suite of proposed 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 FKWTRT 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 proposes to incorporate nearly all of the FKWTRT's consensus recommendations included in the Draft FKWTRP into the proposed FKWTRP, with some modifications. Changes from the FKWTRT's consensus recommendations are noted, along with the rationale for any proposed changes. The FKWTRT also discussed other mitigation and conservation measures that they did not include in their consensus recommendations because they were either economically or technologically infeasible, or did not meet the goals of the MMPA. Information on these can be reviewed in the Draft FKWTRP (FKWTRT, 2010).

One of the FKWTRT's consensus recommendations will not be implemented through this proposed rule. Specifically, the FKWTRT recommended that NMFS require longline vessel crew to notify the captain in the event of a marine mammal interaction. NMFS agrees that crewmembers should immediately notify the captain in the event of a marine mammal hooking or entanglement, and accordingly NMFS is proposing to require that a standard placard be posted on longline vessels instructing this response (see "(6) Requirement for Captains' Supervision of Marine Mammal Interactions" and "(7) Captain Notification Placard Posting Requirement")

below). However, since the captain is ultimately responsible for the crew's response, handling, and release of the marine mammal, NMFS believes that the captain should be directly responsible for ensuring that an effective marine mammal notification procedure is implemented onboard the vessel.

Proposed Regulatory Measures

NMFS proposes the following regulatory measures:

(1) Require the use of "weak" circle hooks sized 16/0 or smaller with a maximum wire diameter of 4.0 mm (0.157 in) and other specific characteristics in the Hawaii-based deep-set longline fishery;

(2) Establish a minimum 2.0 mm (0.079 in) diameter for monofilament leaders and branchlines in the Hawaii-based deep-set longline fishery, and a minimum breaking strength of 400 pounds (181 kg) for leaders and branchlines if any other material is used;

(3) Modify the existing Main Hawaiian Islands Longline Prohibited Area as described in 50 CFR 665.806 to eliminate the seasonal contraction of the boundary; the 71,384 km² (20,812 nmi²) area north of the MHI that is currently open to longline fishing between October-January would be closed to longline fishing year-round;

(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 that would 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 EEZ around Hawaii.

These proposed measures are more fully described below.

(1) “Weak” Circle Hook Requirement.

Analysis of observer data and predictive simulations indicate that the use of small circle hooks (size 16/0 or smaller) 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 (e.g., mouth hookings rather than ingestion) following interactions (FKWTRT, 2010). Small 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 (i.e., straighten the hook) if tension is placed on the line. Thus, the required use of small circle hooks may further reduce the number of incidental M&SI of false killer whales in the deep-set longline fishery.

The standard wire diameter for small circle hooks in the deep-set longline fishery is 4.5 mm [0.177 in]. The FKWTRT believes that small circle hooks with a smaller wire diameter (e.g., 4.0 mm [0.157 in] or 4.2 mm [0.165 in]) would provide even greater conservation benefits to false killer whales. Such “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, it would be expected that the hook would be strong enough to retain target catch, but would bend and straighten under the pull strain of a hooked marine mammal, allowing the animal to release itself and thereby reduce the severity of the animal's injury. However, these weaker hooks are not currently used in the fishery, and their effects on rates of target catch, and therefore their commercial viability, have not been tested. Consequently, the FKWTRT recommended that weak hooks be required in the deep-set longline fishery if it could be demonstrated through additional research that weak hooks do not have a substantial negative impact on bigeye tuna catch rates (i.e., the aggregate weight of bigeye tuna caught on 4.0 mm [0.157 in] or 4.2 mm [0.165 in] circle hooks is not more than 10 percent less than the weight of bigeye tuna caught on 4.5 mm [0.177 in] circle hooks). The rate of false killer whale bycatch is so low that a very large sample size (number of hooks) would be required to detect a difference in bycatch between hooks. However, the FKWTRT recommended the required use of weak circle hooks based on the effects to target species alone, given the expected, though unverified, reduction in the severity of injuries to hooked false killer whales.

NMFS, in partnership and collaboration with the Hawaii-based deep-set longline fishery and independent researchers, conducted a study to quantify the effects of strong (4.5 mm [0.177 in] wire diameter) and weak (4.0 mm [0.157 in] wire diameter) 15/0 circle hooks on bigeye tuna catch. The study examined catch rates of target, incidental (retained non-target), and bycatch (discarded) species; size selectivity; and frequency of straightened hooks. Analysis of data from 127 longline sets conducted between October-December 2010 showed no significant differences in catch per set between hook types for 20 species, including bigeye tuna. There were also no significant differences in bigeye tuna catch per set in either the number of individuals or weight estimated from fork lengths (Bigelow *et al.*, 2011). Weak hooks had a statistically significant

higher rate of straightening, though the rate of straightening was relatively low (0.462 per 1,000 weak hooks, and 0.291 with no catch), and lower than studies of weak hooks in other fisheries (Bigelow et al., 2011).

The researchers note that the study was conducted during a time of year when landed bigeye tuna have a lower mean weight, and it is unknown whether similar results would have been obtained if the research were conducted when bigeye tuna of a larger average size were available to the fishery. However, the study shows that weak hooks can retain even very large bigeye tuna (~122 kg [269 lb], Bigelow et al., 2011). Based on the results of this study showing no statistically significant reduction in target species catch rates, and given the expected positive reduction in the severity of injuries to marine mammals, as recommended by the FKWTRT, NMFS is proposing the required use of weak circle hooks.

The FKWTRT recommended, and NMFS proposes, the required use of circle hooks sized 16/0 or less in the deep-set longline fishery, with the following characteristics: wire diameter not to exceed 4.0 mm (0.157 in); the shank composed of round, non-flattened wire; and 10 degree offset or less. Any hook not meeting the requirement would not be allowed to be used on deep-set trips, though other hooks may be on board the fishing vessel if stowed and unavailable for use.

This proposed new regulation would be added to 50 CFR 665.813, under a revised section heading of “Western Pacific longline fishing requirements.” NMFS also proposes to specifically cross-reference this gear requirement in the take reduction plan regulations under 50 CFR part 229.

(2) Minimum Monofilament Diameter Requirement for Leaders/Branchlines.

An examination of observer data from false killer whale and “blackfish” (animals identified as either false killer whales or pilot whales) interactions indicated that approximately 10 percent (3 of 29) of animals that were entangled or hooked externally or in the mouth were released because the mainline or branchline broke (FKWTRT, 2010). Animals that are released with substantial trailing gear (with the potential to wrap around pectoral fins/flippers, peduncle, or head; be ingested; or accumulate drag) are usually considered seriously injured (Andersen et al., 2008). The FKWTRT believed that, had the line not broken in these cases, the animals might have been able to pull free (i.e., straighten the hook), or attempts could have been made by the captain, crew, or observer to disentangle or dehook the animals. As such, the FKWTRT recommended a minimum breaking strength for branchlines, via a minimum diameter requirement.

For the deep-set longline fishery, the FKWTRT recommended, and NMFS proposes, that any monofilament line used in branchlines or leaders must be 2.0 mm (0.079 in) or larger in diameter. This diameter monofilament line has a breaking strength of approximately 400 pounds (181 kg). Any other materials used in branchlines or leaders must have a breaking strength of 400 pounds (181 kg) or greater. The intent is that the gear be assembled and maintained such that the hook is the weakest component of the terminal tackle.

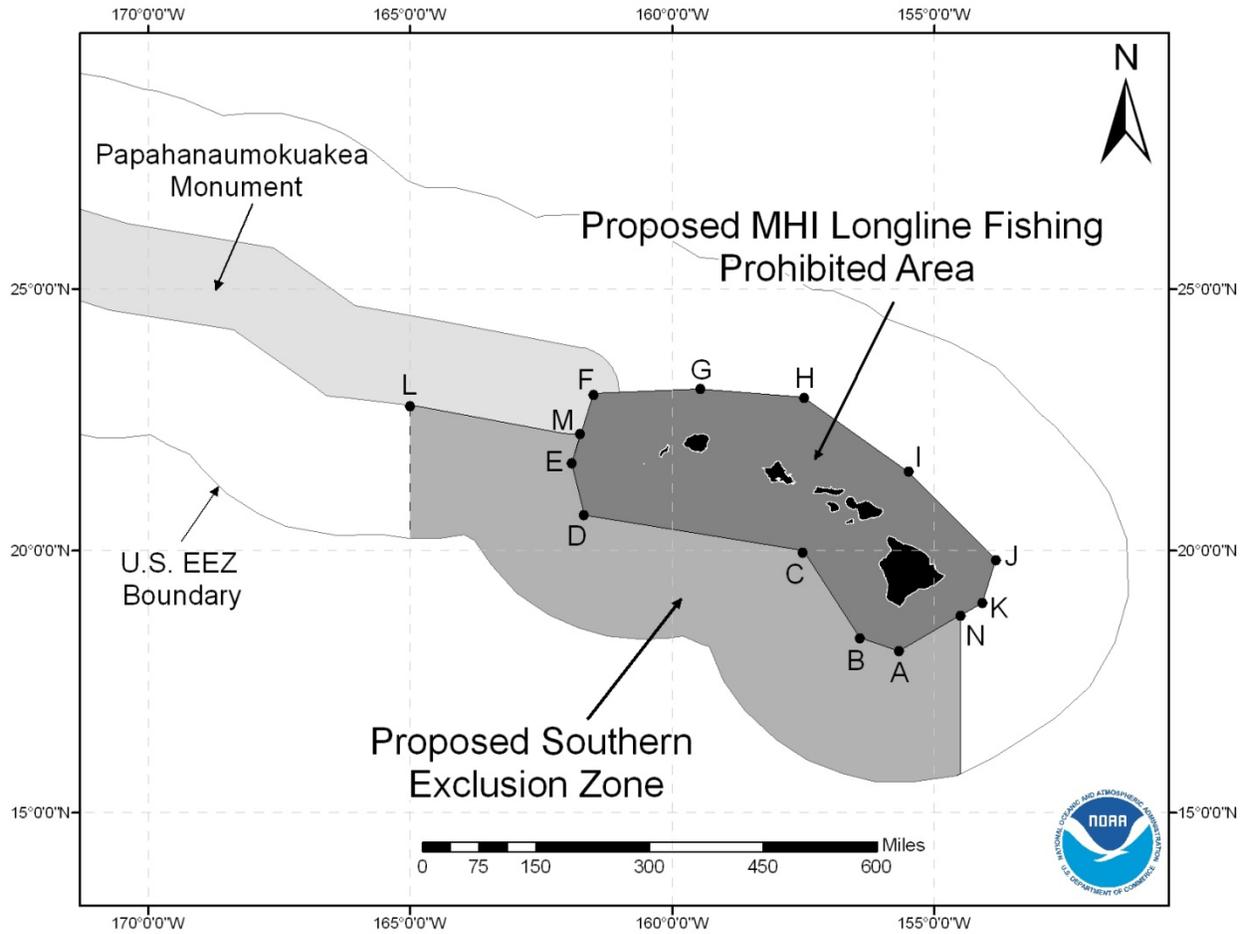
This proposed new regulation would be added to 50 CFR 665.813, under a revised section heading of “Western Pacific longline fishing requirements.” NMFS also proposes to specifically cross-reference this gear requirement in the take reduction plan regulations under 50 CFR part 229.

(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(c)). The outer extent of the boundary contracts 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). Incidental M&SI of false killer whales and blackfish have been documented in the area where longline fishing is only allowed between October and January. This area falls within the area of overlap between the Hawaii Insular and Hawaii Pelagic stocks of false killer whales as defined in the 2010 SAR (Carretta *et al.*, 2011). Given that longline fishing in this area may impact both false killer whale stocks, the FKWTRT recommended that this area be closed to commercial longline fishing year-round. Such an exclusion would, in effect, maintain the current boundary of the February-September longline exclusion zone prohibitions throughout the entire year. It is anticipated that this closure would substantially reduce the risk the deep- and shallow-set longline fisheries pose to the Hawaii Insular stock of false killer whales, because longline fishing would thereby be prohibited from nearly the entire range of the Hawaii Insular stock. It would also likely reduce incidental M&SI of the Hawaii Pelagic stock of false killer whales in that area.

NMFS is proposing to implement this recommendation by revising the boundaries of the existing MHI longline fishing prohibited area at 50 CFR 665.806(c) to eliminate the seasonal contraction (Figure 1). NMFS also proposes to prohibit commercial longline fishing in this Main Hawaiian Islands Longline Fishing Prohibited Area in the take reduction plan regulations under 50 CFR part 229.

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



(4) Required Annual Certification in Marine Mammal Interaction Mitigation.

The FKWTRT 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 FKWTRT 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 FKWTRT recommended NMFS expand the existing Protected Species Workshops, required under 50 CFR 665.814, to incorporate additional information regarding marine mammal interactions, including an MMPA regulatory overview; species identification; marine mammal handling and release techniques; and best practices for reducing marine mammal bycatch. The FKWTRT also recommended that NMFS develop a voluntary component of the training on marine mammal photo-identification techniques for owners and operators interested in participating in the research.

NMFS is proposing to implement the FKWTRT's recommendation. 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 of, 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 proposes to expand the content

of the workshops in consultation with the FKWTRT, as appropriate, to meet the needs of the FKWTRP. To ensure the marine mammal component is maintained by regulation as part of the workshops, NMFS is also proposing to add 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 FKWTRT recommended, and NMFS proposes, to require posting a NMFS-approved marine mammal handling and release informational placard onboard all longline vessels in the Hawaii-based fleet in a location where it would be visible to the captain and crew. NMFS believes this proposed action would facilitate the careful handling and release of false killer whales and other small cetaceans caught incidentally during longline fishing. The posting requirement would ensure NMFS' guidelines are readily available for reference during a hooking or entanglement event. This proposed requirement would be part of 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 proposes to expand 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 FKWTRT 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 bycatch events. The FKWTRT recommended, and NMFS proposes, to require

the captain of each longline vessel to supervise the handling and release of any hooked or entangled marine mammal. The captain would not necessarily need to be on deck, but could, for example, oversee and direct specific actions from the wheelhouse, if he or she were in visual and/or verbal contact with the crew. This proposed requirement would be part of the take reduction plan regulations at 50 CFR part 229.

(7) Captain Notification Placard Posting Requirement.

The FKWTRT recommended, and NMFS proposes, to require a NMFS-approved placard, that instructs the vessel crew to notify the captain immediately if a marine mammal is hooked or entangled, be posted onboard all active longline vessels in a location where it would be visible to the crew. It is expected that this measure would 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 proposed requirement would be part of the take reduction plan regulations at 50 CFR part 229.

(8) Southern Exclusion Zone Closure.

The FKWTRT recommended and NMFS proposes to establish a “Southern Exclusion Zone” (SEZ) that would 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 EEZ around Hawaii. Using observed incidental M&SI would allow for real-time management of the SEZ to prevent incidental M&SI from exceeding PBR, rather than waiting until the end of the year for extrapolated M&SI estimates, by which time PBR might be exceeded. The SEZ would be bounded on the east at 154.5 ° W. longitude, on the west at 165° W. longitude, on the north by the existing February-September MHI Longline Exclusion Zone

and the Papahānaumokuākea Marine National Monument; and on the south by the EEZ boundary (Figure 1). The SEZ closure would cover 386,122 km² (112,575 nmi²), that if implemented, would reduce the area available to longline fishing within the EEZ around Hawaii by approximately 17 percent.

The FKWTRT recommended these boundaries because they encompass an area with a high historical concentration of observed false killer whale and blackfish incidental takes in the deep-set longline fishery. As such, the FKWTRT and NMFS determined that this is an area where protective measures (i.e., a closure) would be likely to have the greatest conservation benefit. A closure would prevent further false killer whale M&SI in the deep-set longline fishery in that area. The FKWTRT and NMFS also believe that, to be effective, the proposed closure must be sufficiently large to prevent false killer whales from simply following boats and gear to areas outside of the closure. NMFS believes the closure of the SEZ, when triggered by specific levels of observed false killer whale M&SI, would be necessary and appropriate to eliminate future interactions in the area and to reduce the overall level of false killer whale interactions in the deep-set longline fishery.

The FKWTRT recommended that the SEZ be managed on the basis of “Plan Years,” rather than calendar years. A “Plan Year” would be the 365-day period starting the first day of the month immediately following 30-days after publication of the final FWKTRP in the Federal Register. The FKWTRT believed this would allow for the more immediate implementation of the management measures, instead of delaying implementation until the beginning of the calendar year following publication of the final FKWTRP in the Federal Register. Instead, NMFS proposes to base the cycle on the fishing year, which is currently defined to be the same as the calendar year (50 CFR 665.12). Management of the SEZ using fishing years would mean

there was a single definition of the annual cycle, rather than the multiple, non-synchronous cycles if “Plan Years” were used. The single annual cycle would facilitate understanding within the regulated community and provide for efficient administration of the measures. Additionally, managing on the basis of fishing years would not result in a delay in implementation of take reduction measures: NMFS proposes that observed incidental M&SI would be counted toward the trigger immediately upon the effective date of the final FKWTRP. If that date does not coincide with the beginning of the fishing year, observed incidental M&SI would be counted against the trigger from that point forward for the remaining portion of the first fishing year. Any incidental M&SI in the first year that was observed before the effective date of the final FKWTRP would not be counted retroactively against the trigger.

For example, if the final rule becomes effective on May 15, 2012, all false killer whale incidental M&SI that are observed from that point forward until December 31, 2012 would count toward the trigger. However, in that example, any false killer whale mortalities or serious injuries that occurred in that calendar year before May 15 (i.e., from January 1-May 14, 2012) would not be counted toward the trigger for 2012. The tally of M&SI would be “re-set” on January 1, 2013, and any observed takes from January 1-December 31, 2013 would count toward the trigger in 2013.

The proposed SEZ measures would apply only to the deep-set longline fishery, and not the shallow-set longline fishery, because of the deep-set longline fishery’s much higher rate of false killer whale mortalities and serious injuries. Additionally, the shallow-set longline fishery operates largely outside of the EEZ around Hawaii, and thus has an even lower likelihood of interacting with a false killer whale within the EEZ. Therefore, mortalities and serious injuries of false killer whales in the shallow-set longline fishery would not count toward the SEZ trigger,

and the fishery would not be affected by any closure of the SEZ. However, mortalities and serious injuries of false killer whales in the shallow-set longline fishery would still be included in NMFS estimates and would be presented in the SAR.

The following paragraphs describe five proposed steps NMFS would take when determining whether to prohibit deep-set longline fishing in the SEZ. Although the proposed SEZ management measures are largely consistent with the Draft FKWTRP, there are several instances where diversions from the FKWTRT's recommendations were necessary. Those instances are specifically noted and explained.

(a) Defining the trigger. The SEZ would be managed in real-time based on observed incidental M&SI of false killer whales, so that false killer whale incidental M&SI in the deep-set longline fishery inside the EEZ around Hawaii does not exceed the Hawaii Pelagic stock's PBR level. Therefore, the FKWTRT recommended that the real-time, estimated incidental M&SI be calculated using a simple extrapolation from the observed number of false killer whale incidental M&SI, using the level of observer coverage for that year. Because of inter-annual variability in incidental M&SI, NMFS typically calculates 5-year average annual incidental M&SI levels for comparing against PBR, rather than relying on single-year estimates. Therefore, NMFS proposes to convert this extrapolated estimate of incidental M&SI to a 5-year average for comparison against PBR. This is consistent with the FKWTRT's deliberations. For example, at the current level of 20 percent observer coverage, two observed mortalities or serious injuries of false killer whales inside the EEZ around Hawaii would result in an estimate of 10 false killer whales for that year, which exceeds the stock's current PBR level of 2.5. But, if no other false killer whales were taken in the following 4 years, a 5-year average incidental M&SI would be approximately 2 animals per year, which is below the stock's PBR level. Any additional

observed mortalities or serious injuries would cause the estimated incidental M&SI level to exceed the stock's PBR level, thus indicating the existing management measures in the FKWTRP were not sufficiently reducing incidental M&SI and additional management measures (i.e., a closure of the SEZ) would be necessary. Thus, under this scenario where PBR was 2.5 and observer coverage was 20 percent, the trigger would be set at 2 observed false killer whale mortalities or serious injuries.

The two factors on which the trigger is based -- observer coverage and the PBR for the Hawaii Pelagic stock of false killer whales -- may change from one year to the next. NMFS proposes to specify the equation used to calculate the trigger in the FKWTRP regulations and to publish a notice in the Federal Register upon initial FKWTRP implementation and whenever the trigger was changed, specifying the levels of PBR and observer coverage used to calculate the trigger.

NMFS proposes to calculate the trigger for implementing additional required management measures using the following equation:

$$\text{trigger} \leq 5 * (\text{observer coverage}) * (\text{PBR})$$

The following process described how this equation would be used for calculating the trigger for closing the SEZ:

(i) Divide the (unknown) trigger (i.e., the number of observed animals that are determined to have been killed or seriously injured) by the level of observer coverage to obtain the extrapolated annual estimate of incidental M&SI: $(\text{trigger}) / (\text{observer coverage}) = \text{annual incidental M\&SI estimate}$;

(ii) Assuming there would be no additional incidental M&SI in the following four years, divide the estimate from step (i) by 5 to obtain the 5-year average annual incidental M&SI level:

$[(\text{trigger}) / (\text{observer coverage})] / 5 = \text{5-year average incidental M\&SI estimate};$

(iii) Set the 5-year average annual incidental M&SI estimate from step (ii) to less than or equal to PBR: $[(\text{trigger}) / (\text{observer coverage})] / 5 \leq \text{PBR};$

(iv) Solve for the trigger: $\text{trigger} \leq 5 * (\text{observer coverage}) * (\text{PBR});$ and

(v) Round the trigger down to the nearest whole number, because the trigger is based on numbers of observed (whole) animals that are determined to have been killed or seriously injured.

For example, if PBR were 2.5 and observer coverage were 25 percent, the trigger would be set at 3, that is $(5 * (0.25) * (2.5) = 3.125$, rounded down to nearest whole number). If the trigger were zero, NMFS would close the SEZ at the beginning of the fishing year without waiting for a single observed false killer whale mortality or serious injury.

These figures would 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. For example, the official bycatch estimates include prorated incidental takes of false killer whales of unknown stock origin within the Hawaii insular/pelagic stock overlap zone, and prorated incidental takes based on the proportions of observed interactions that resulted in death, serious injury, or non-serious injury. Additionally, the estimates used in calculating the trigger would be necessarily less accurate and precise than the official estimates because they would be calculated in real-time as false killer whales were observed incidentally taken by the fishery throughout the year, without the benefit of the entire year's data.

The proposed trigger would apply only to the Hawaii Pelagic stock of false killer whales given the stock's strategic status, the stated short-term goal of the proposed FKWTRP, and the location of the proposed closure. For the purposes of identifying the SEZ trigger and implementing contingency measures, any false killer whale incidentally taken inside the EEZ around Hawaii would be assumed to be part of the Hawaii Pelagic stock, unless the animal could be positively identified as belonging to the Insular stock through photo-identification or genetic analysis of a tissue sample. Additionally, only observed serious injuries or mortalities would be counted when determining whether the trigger was met; injuries determined to be non-serious would not count toward the trigger. Therefore, a determination would need to be made before incidental M&SI could be calculated. Under current protocol, on-board observers collect data on marine mammal interactions. NMFS PIROP staff debrief the observers and ensure the data are, in fact, accurate. NMFS scientists then evaluate each interaction by comparing the data against objective criteria to determine whether the injury is serious. Finally, NMFS Pacific Islands and Southwest Fisheries Science Centers and the Pacific Scientific Review Group review the scientists' determination before NMFS makes a final injury determination (i.e., non-serious or serious). The FKWTRT recommended that NMFS expedite the process of making serious injury determinations for these animals, to allow for the timely implementation of specified contingency measures (see “(3) Expedite False Killer Whale Serious Injury Determinations” under “Proposed Non-Regulatory Measures” below).

(b) Observed incidental M&SI below the trigger. For each mortality or serious injury in the deep-set longline fishery inside the EEZ around Hawaii that is below the established trigger in a given fishing year, NMFS would notify the FKWTRT, and for the last mortality or serious injury before the trigger is met, NMFS would convene the FKWTRT by teleconference to

discuss the circumstances of the event. For example, if the trigger is set at 4 observed false killer whales, NMFS would notify the FKWTRT of the first and second mortalities or serious injuries, and would convene the FKWTRT by teleconference after the third observed mortality or serious injury. This process is a slight modification from the FKWTRT's recommendations; the FKWTRT only explicitly considered the case of a trigger of 2, and thus did not make specific recommendations regarding NMFS' actions for observed incidental M&SI other than the single mortality or serious injury just before the trigger would be met. However, NMFS believes this proposed process meets the FKWTRT's intent regarding notification and discussion of observed false killer whale incidental M&SI.

(c) Observed mortality or serious injury that meets the trigger. The FKWTRT recommended, and NMFS proposes, that if there is an observed false killer whale mortality or serious injury in the deep-set longline fishery inside the EEZ around Hawaii that meets the established trigger for a given year, NMFS would close the SEZ until the end of that year, and then convene the FKWTRT for an in-person meeting. As described above, NMFS would first need to confirm that the animal was a false killer whale and determine that the animal was seriously injured or killed, before NMFS closed the SEZ. For example, if the trigger is set at 4 observed false killer whales, following the fourth observed false killer whale mortality or serious injury, NMFS would close the SEZ to deep-set longline fishing until the end of the year and would convene the FKWTRT for an in-person meeting. NMFS would reopen the SEZ at the beginning of the next year. The availability of funding may limit NMFS' ability to convene the FKWTRT for an in-person meeting. Regardless of whether NMFS has convened an in-person FKWTRT meeting, NMFS would reopen the SEZ at the beginning of the next year.

If a closure of the proposed SEZ is triggered, NMFS would notify the fishery and close the area for the specified time period (the rest of the year) through a Federal Register notice. The notice would include the specifics of the closure, as well as when and how the SEZ would be reopened.

Additional mortalities or serious injuries of false killer whales in the deep-set longline fishery in the EEZ after the SEZ is closed may warrant review of FKWTRP 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 EEZ around Hawaii, then NMFS would again convene the FKWTRT to discuss the circumstances of the event and consider the effectiveness of the SEZ closure. The FKWTRT may be convened by teleconference or other efficient means.

(d) Observed incidental mortality or serious injury in consecutive year(s). If the SEZ is closed in a given year, and there is one observed false killer whale mortality or serious injury in the deep-set longline fishery inside the EEZ around Hawaii in any of the next four consecutive years, NMFS proposes to convene the FKWTRT for an in-person meeting, and close the SEZ to deep-set longline fishing until reopened by NMFS after consultation with the FKWTRT.

This proposed measure differs from the FKWTRT's recommendation. The FKWTRT recommended that if NMFS closed the SEZ in a given year upon meeting the established trigger (and reopened the SEZ at the beginning of the next year), NMFS would again close the SEZ in the next consecutive year only if the same trigger was met. NMFS believes the FKWTRT's recommendation for this step is incompatible with the statutory requirement to bring incidental M&SI below PBR within six months of plan implementation, and to insignificant levels within 5 years. For example, at the current level of 20 percent observer coverage and PBR level of 2.5,

the trigger would be set at 2. If there were two observed mortalities or serious injuries of false killer whales inside the EEZ around Hawaii, this would result in an estimated 10 false killer whale mortalities or serious injuries for that year. If, as per the FKWTRT's recommendation, the same trigger (2) was met in the next year, this would also result in an estimate of 10 false killer whales for that year, for a total of 20 false killer whale mortalities or serious injuries in two years. Even if no other false killer whales were taken in the following 3 years, a 5-year average incidental M&SI would be approximately 4 animals per year, which exceeds the stock's PBR level of 2.5 animals per year. The amount by which PBR would be exceeded under the FKWTRT's recommended trigger/closure regime would be even larger as PBR (and the trigger) increases. Therefore, NMFS is proposing a lower threshold for closing the SEZ, to increase assurance that false killer whale mortalities and serious injuries do not exceed PBR.

As stated in "(a) Defining the trigger" above, the calculation for the trigger assumes there would be no additional incidental M&SI in the four years following the initial, temporary SEZ closure. In almost all cases (except for the unlikely scenarios where there are very high levels of observer coverage and a high PBR), a single additional mortality or serious injury in any of those four years would cause the 5-year average incidental M&SI level to exceed PBR, thus necessitating re-closure of the SEZ. The FKWTRT's recommendation to use the same trigger in consecutive years is not compatible with the assumptions of the trigger calculation. Additionally, the FKWTRT developed the SEZ and its associated closures as a "backstop" to reduce false killer whale incidental M&SI should the other measures in the plan fail to achieve the required reductions. The fact that false killer whales may continue to be hooked or entangled in the shallow-set longline fishery anywhere it operates, and in the deep-set longline fishery in

open areas of the EEZ around Hawaii and on the high seas provides support for a more protective set of restrictions in the SEZ.

For example, if PBR were 4 and observer coverage were 20 percent, the trigger would be set at 4. If 4 false killer whale incidental M&SI were observed in the current year (“year 1”), the annual incidental M&SI estimate would be 20, and assuming zero incidental M&SI in the next four years, the 5-year average annual incidental M&SI level would be 4, which is equal to PBR. Under this scenario, NMFS would close the SEZ after the fourth observed false killer whale mortality or serious injury, and reopen the SEZ at the beginning of the next year. If there was 1 false killer whale mortality or serious injury observed in the following year (“year 2”), the annual incidental M&SI estimate for year 2 would be 5, and the 5-year average annual incidental M&SI level (including the estimated 20 M&SI from year 1, and the estimated 5 M&SI from year 2, and assuming zero M&SI for the following 3 years) would be 5, which exceeds PBR. Therefore, NMFS would close the SEZ following the first observed mortality or serious injury in year 2.

If a closure of the proposed SEZ is triggered, NMFS proposes to notify the fishery and close the area through a Federal Register notice. The notice would include the specifics of the closure, as well as conditions NMFS would consider in determining when and how to reopen the SEZ.

(e) Reopening the SEZ. The FKWTRT recommended that NMFS reopen the SEZ if one or more of the follow criteria were met: (i) NMFS determines, upon consideration of the FKWTRT’s recommendations and evaluation of all relevant circumstances (e.g., the mortality or serious injury was a result of non-compliance with gear requirements, rather than an indication that the FKWTRP measures were ineffective), that reopening of the SEZ is warranted; (ii) in the 2-year period immediately following the date of the SEZ closure, the deep-set longline fishery

has zero observed false killer whale incidental M&SI within the remaining open areas of the EEZ around Hawaii; (iii) in the 2-year period immediately following the date of the closure, the deep-set longline fishery has reduced its combined rate of false killer whale incidental M&SI within the remaining open areas of the EEZ around Hawaii and on the high seas (which includes the EEZ around Johnston Atoll, but not Palmyra Atoll) by an amount proportionate to the rate that would be required to reduce false killer whale incidental M&SI within the EEZ around Hawaii to below the stock's PBR (e.g., if the PBR for the Hawaii Pelagic stock inside the EEZ around Hawaii was 2.5 and false killer whale incidental M&SI inside the EEZ was 7.3, an approximately 66 percent reduction in estimated incidental M&SI for the entire deep-set fishery would be necessary to meet the threshold); or (iv) the average estimated level of false killer whale incidental M&SI in the deep-set longline fishery within the remaining open areas of the EEZ around Hawaii for up to the 5 most recent years following implementation of the final FKWTRP is below the PBR for the Hawaii Pelagic stock of false killer whales at that time.

NMFS may consider these and other criteria when determining when to reopen the SEZ, but is not proposing to include the criteria in regulations. NMFS needs to maintain flexibility and consider scenarios not addressed by the criteria developed by the FKWTRT. For example, if the FKWTRT recommended and NMFS adopted additional measures intended to reduce false killer whale incidental M&SI, NMFS could reopen the SEZ before the criteria outlined above were met. Alternatively, NMFS could consider keeping the SEZ closed for a period longer than specified in the criteria above, if the total number of false killer whale incidental M&SI, including those incidentally taken in open areas of the EEZ, exceeded PBR to such a degree that the 5-year average incidental M&SI level could not drop below PBR.

The proposed requirements for the SEZ trigger and procedures would be specified at 50 CFR part 229.

Proposed Non-Regulatory Measures

NMFS proposes the following 6 non-regulatory measures, the implementation for which would be NMFS' responsibility:

- (1) Increase the precision of bycatch estimates in the deep-set longline fishery;
- (2) Notify the FWKTRT when there is an observed interaction of a known or possible false killer whale, and provide the FKWTRT with any non-confidential information regarding the interaction;
- (3) Expedite the process for confirming the species identification of animals involved in such interactions and for making serious injury determinations;
- (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 FKWTRT; and
- (6) Reconvene the FWKTRT at regular intervals.

Though these measures are part of the proposed FKWTRP, they are not proposed as regulations, and would not be included in the take reduction plan regulations at 50 CFR part 229.

These proposed 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 ESA Biological Opinion on the deep-set longline fishery (NMFS, 2005b). Coverage levels vary throughout the year because of fluctuation in the longline fleet's activity

level, the demands of 100 percent coverage in the shallow-set longline fishery, and an influx of observers after completing the PIROP observer training course (McCracken, 2009). Observed trips in the deep-set longline fishery are selected using two sampling schemes to accommodate this fluctuating coverage and to utilize observers efficiently. The primary scheme is a systematic sample of “call numbers,” which are assigned when longline vessels call the PIROP contractor before departing on a fishing trip (McCracken, 2009). Currently, the quarterly sample selected under this systematic design is targeted at 15 percent, but it may be closer to 10 percent, particularly in the first quarter of the year. Additional trips needed to reach the full targeted level (i.e., 20 percent) are selected using a secondary sampling scheme, when all trips selected by the systematic sample are already covered and an observer is available for deployment. The additional trips are randomly selected with equal probability from the calls received that day that had not already been selected. This secondary sampling, or “day sampling,” is flexible and dependent on the need to deploy observers (McCracken, 2009).

The FKWTRT recommended NMFS increase observer coverage in the deep-set longline fishery to at least a 25 percent average quarterly coverage rate, to increase the precision (i.e., decrease the error) of the bycatch estimate in the fishery. Following submission of the FKWTRT’s recommendations, NMFS conducted an analysis to determine how the error in estimated bycatch of cetaceans could be reduced by increasing observer coverage (McCracken and Boggs, 2010). This analysis indicates that ensuring the systematic coverage is at a minimum of 15 percent year-round provides a greater benefit in relation to error reduction than a systematic sample increase from 15 percent to 20 percent, or an overall sample increase from 20 percent to 25 percent.

NMFS proposes to implement an increase in systematic observer coverage in the deep-set longline fishery, though there would be no increase in overall coverage. Day sampling would 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 would work 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.

(2) Notify the FKWTRT of Observed Interactions.

The FKWTRT requested that NMFS notify the Team when there is an observed interaction of a known or possible false killer whale, and provide the Team with any non-confidential information regarding the interaction. This information is currently available through PIROP's quarterly and annual reports. Because this information may be useful for the FKWTRT as it considers the success of the management measures and considers amendments, NMFS proposes to 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 FKWTRT 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.

The FKWTRT recommended that when there is an observed interaction of a known or possible false killer whale, NMFS should confirm species identification and make the serious injury determination as soon as possible after the observer debriefing and data approval for the interaction, and provide the non-confidential information to the FKWTRT with the rationale for the determination. Currently, preliminary serious injury determinations for the Hawaii-based

longline fisheries are made once a year by NMFS scientists, and are reviewed by the Pacific Scientific Review Group (PSRG) at their annual meeting before being finalized. NMFS understands that an expedited process to provide final serious injury determinations closer to real-time would assist the FWKTRT in monitoring the success of the FKWTRP, and would be necessary to determine whether the trigger for closing the Southern Exclusion Zone has been met. Therefore, NMFS proposes to make the serious injury determinations as soon as possible by coordinating with PIROP, NMFS Pacific Islands and Southwest Fisheries Science Centers, and the Pacific Scientific Review Group.

(4) Changes to Observer Data Collection Protocol and Training.

In its deliberations, the FKWTRT relied heavily on analyses of observer program data. The FKWTRT noted that specific information that is not currently collected would be useful to support future FKWTRT deliberations and to further understand and identify patterns of marine mammal bycatch. The FKWTRT recommended that NMFS modify the observer data forms to collect the following types of information: (a) differentiation among marine mammal mouth hooking types (lip, jaw, internal, ingested, other); (b) more detail on how bycaught marine mammals are handled and any efforts made to release them without gear; (c) hook type and terminal tackle configuration of the gear involved in the interaction; (d) whether sets are split, and the configuration of split sets; (e) details of vessel light configuration and how the lights are utilized; (f) presence/absence of false killer whales during setting and haul-back of gear; (g) false killer whale sighting data (e.g., location, group size, behavior) during transits, as well as visual sighting effort data; and (h) injuries to vessel crew that are incurred due to gear changes and release of protected species.

The FKWTRT also made recommendations regarding observer protocol during and after marine mammal interactions. The FKWTRT recommended that observers should: (a) encourage the vessel crew to inform the captain immediately if/when a marine mammal is hooked or entangled; (b) encourage the vessel crew not to cut the line unless instructed by the vessel captain or the observer; (c) encourage captains to comment on the observer's Marine Mammal Biological Data Form after an interaction when a captain can offer additional information; and (d) retain gear from interactions, including branchlines and leaders even in the absence of a hook, and collect any marine mammal tissues that may be present on the gear.

The FKWTRT made the following recommendations regarding observer training: (a) include videos from prior marine mammal hookings and entanglements and subsequent releases; (b) provide better photographic equipment to experienced observers and train them in photo-identification of individual false killer whales through dorsal fin and other markings, to support false killer whale research; and (c) train a highly-qualified sub-set of observers to obtain biopsy samples of bow-riding false killer whales, after authorization through a research permit.

NMFS proposes to implement 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. For example, the Marine Mammal Biological Data form prompts the observer to differentiate between mouth hookings and ingested hooks, if known, and would only require the addition of check boxes for lip or jaw hookings. The form also contains check boxes for each gear type that remained on the animal (e.g., branchline, weight), boxes to note the hook type and size involved in the interaction, and a comment section specifically for describing the gear remaining on the animal. The form also has space for other comments and drawings of

the interaction, and observers are instructed to provide as much detail as possible on all aspects of the interaction, including any efforts to remove gear from the animal. NMFS may develop a list of specific questions to ask the observer during debriefing to prompt for further detail. For these specific items, the forms may need only minor changes to address the FKWTRT's recommendations.

Regarding observer protocol during and after marine mammal interactions, observers are already instructed (via training and the Observer Manual) to share with the vessel operator all data items recorded, when requested, and if he or she is in disagreement with the observer, allow operators to record their own views on the original data forms. Observers are also trained to retain gear from marine mammal interactions and to collect any marine mammal tissue on the gear. Finally, regarding observer training, NMFS includes 4 to 5 videos from prior marine mammal hookings and entanglements in a lecture about marine mammal interactions. These presentations are regularly updated with new videos when available.

(5) 2010 HICEAS II Survey Data.

NMFS conducted a cetacean assessment survey in the EEZ around Hawaii (Hawaiian Islands Cetacean and Ecosystem Assessment Survey, or HICEAS II) in August-December 2010. The survey was a collaborative effort between the NMFS Pacific Islands and Southwest Fisheries Science Centers, and involved 175 days at sea on two NOAA research vessels. It is anticipated that the HICEAS II survey will result in updated abundance estimates for all Hawaiian cetaceans, including false killer whales; preliminary estimates will likely be available by the end of 2011 or early 2012. The FKWTRT recommend that NMFS expedite the processing of the survey data and provide preliminary results to the FKWTRT once the PSRG

has completed its review. The FKWTRT also recommended the PSRG complete its review as expeditiously as possible.

To the extent possible, NMFS proposes to expedite processing and review of the 2010 HICEAS II survey data and provide preliminary results to the FKWTRT.

(6) Reconvene FWKTRT at Regular Intervals.

The FKWTRT recommended that NMFS should reconvene the FKWTRT every 6 months for at least 2 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 to the FKWTRP if necessary. The availability of funding may limit the frequency with which NMFS can reconvene the FKWTRT for in-person meetings. Therefore, NMFS proposes to reconvene the FKWTRT at regular intervals for in-person meetings and/or teleconferences, depending on available funding.

Additional Research and Data Collection

The FKWTRT 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 top nine ranked research activities include: (1) evaluate the impact of weak and/or circle hooks on false killer whale bycatch; (2) understand the impact of weak hooks on target species catch rates; (3) develop methods for the longline fleet to use acoustic recorders to determine false killer whale presence prior to setting gear; (4) assess shortline and kaka line fishing, including the number of vessels, location, timing, and method of fishing; (5) distinguish false killer whale calls from other odontocete species; (6) telemetry studies to examine the range and movement of false killer whales; (7) regular surveys of the EEZ around Hawaii, at least every 5 years, to estimate cetacean abundance; (8) continue

research into false killer whale abundance using towed and stationary acoustics; and (9) collect additional false killer whale genetic samples to assess population structure. The FKWTRT 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 FKWTRT 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 proposes to pursue the additional research and data collection goals outlined by the FKWTRT, within the constraints of available funding. Further, NMFS proposes to consider the FKWTRT’s recommendations for additional research and data collection when establishing NMFS’ funding priorities. NMFS would follow the recommendations to the extent that good scientific practice and resources allow. As feasible and appropriate, NMFS would consult and coordinate with the FKWTRT during this process. As noted above for non-regulatory measures, these research recommendations are part of the proposed FKWTRP, but they are not proposed as regulations and would not be included in the take reduction plan regulations at 50 CFR part 229.

Evaluating the Effectiveness of the FKWTRP

The MMPA specifies that take reduction teams shall meet every six months, or at such other intervals as necessary, to monitor the implementation of the final take reduction plan until the objectives of the plan have been met. Under the proposed FKWTRP, the FKWTRT would periodically: (1) analyze the status of scientific information on false killer whales; (2) evaluate the effectiveness of the FKWTRP, both in terms of meeting MMPA and stated goals; and (3) adjust the FKWTRP’s management measures and research program, as appropriate, to ensure that the short- and long-term goals of the FKWTRP will be met. NMFS would provide to the

FKWTRT updates on the following types of information to inform these periodic assessments:

(1) status of FWKTRP implementation; (2) SARs; (3) observed false killer whale interactions in the longline fishery and associated serious injury determinations; (4) preliminary results of the HICEAS II survey; (5) other data collection and research findings, including the results of the weak circle hook experiment; and (6) the status of observer coverage. The timing of these assessments would be tied to both the availability of data and the time needed to adequately evaluate the effectiveness of management measures or the results of the research program.

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 FKWTRT recognized that there may be other measures of success of the FKWTRP, and identified 12 measures of progress or success for various components of the Draft FKWTRP. These include: (1) Fully implement circle hooks in the deep-set longline fishery; (2) complete weak circle hook research and associated implementation of weak circle hooks, as indicated by research; (3) achieve zero false killer whale incidental M&SI in two years within the EEZ around Hawaii; (4) achieve a reduction of false killer whale incidental M&SI consistent with the percentage needed to move below PBR within the EEZ around Hawaii; (5) reduce the false killer whale incidental M&SI rate; (6) measurably reduce the false killer whale incidental take rate; (7) convene the FKWTRT twice each year for the two years following FKWTRP implementation; (8) achieve observer deployment levels of 25 percent or more in the deep-set longline fishery; (9) make progress in each of the four identified research categories; (10) complete the 2010 HICEAS II survey and provide the results to the FKWTRT in the manner recommended in the Draft FKWTRP; (11) complete cetacean assessment surveys on the

recommended schedule (every five years); and (12) achieve rapid processing of and notification of the FKWTRT of false killer whale incidental M&SI information.

NMFS would monitor and consult with the FKWTRT regarding progress toward meeting the goals of the FKWTRP and the other identified measures of success. The measures of success listed above may change based on the management measures contained in the final FKWTRP (e.g., an increase in precision of bycatch estimates rather than an overall increase in observer coverage in the deep-set longline fishery).

Public Comments Solicited

NMFS is soliciting comments on any aspect of this proposed rule, including the development and implementation of the FKWTRP pursuant to MMPA section 118(f)(1) and the regulatory and non-regulatory measures proposed. NMFS is particularly interested in comments on the proposed SEZ, including the methods for calculating and determining the trigger, changing the trigger, and implementing the closure based on the trigger. NMFS is also specifically soliciting comments on the timing for implementing the proposed measures, and whether certain proposed measures, such as the hook and branchline requirements, would benefit from delayed implementation to allow time for suppliers to obtain an adequate quantity of the required gear, and for fishermen to purchase and switch over their gear.

Classification

NMFS determined that this action is consistent to the maximum extent practicable with the enforceable policies of the approved coastal management program of the State of Hawaii. This determination has been submitted for review by the responsible state agency under section 307 of the Coastal Zone Management Act.

Executive Order (E.O.) 13132 requires agencies to take into account any federalism impacts of regulations under development. It includes specific consultation directives for situations where a regulation will preempt state law, or impose substantial direct compliance costs on state and local governments (unless required by statute). This proposed rule does not contain policies with federalism implications under E.O. 13132. All of the proposed actions would occur in the Exclusive Economic Zone beyond state jurisdiction. Pursuant to E.O. 13132, the Assistant Secretary for Legislative and Intergovernmental Affairs will provide notice of the proposed action and request comments from the governor of the State of Hawaii.

NMFS prepared a draft environmental assessment for this action that discusses the impact on the environment as a result of this proposed rule. The Preferred Alternative (the proposed action) would be 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 weak circle hooks, minimum line diameter, 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. No effects to the physical environment, including designated Essential Fish Habitat, Habitat Areas of Particular Concern, Critical Habitat, or physical features, or to target and non-target species would be 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 due to reduced catch and 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, including recreationists and tourists, wildlife viewers, scientists and educators, and members of present and future generations of the general public; and some positive effect on non-longline commercial fisheries or recreational/subsistence fisheries if target fish population abundance rises. A copy of the draft environmental assessment is available on www.regulations.gov and the FKWTRT website (<http://www.nmfs.noaa.gov/pr/interactions/trt/falsekillerwhale.htm>), and is available upon request from the Regulatory Branch Chief [see ADDRESSES].

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

NMFS prepared an initial regulatory flexibility analysis (IRFA), pursuant to section 603 of the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*), that describes the economic impact this proposed rule, if adopted, would have on small entities. A description of the action, why it is being considered, and its legal basis are included in the preamble of this proposed rule. A summary of the analysis follows. The full analysis is available on www.regulations.gov or by request from the Regulatory Branch Chief [see ADDRESSES].

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 88 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.

The alternatives considered and analyzed include three options. Alternative 1 (the No Action alternative) would maintain the status quo management for the Hawaii-based longline fisheries under the Fishery Ecosystem Plan for Pacific Pelagic Fisheries of the Western Pacific Region. Alternative 2 (the Preferred Alternative and proposed action) would implement the regulatory and non-regulatory measures recommended by the FKWTRT, with some modifications. These measures are described in the preamble of this proposed rule. Alternative 3 would close the EEZ around Hawaii to all commercial longline fishing. Alternatives 2 and 3 are herein referred to as the “Action Alternatives.”

The Action Alternatives are not expected to generate benefits to the small businesses in the longline fishery, as both alternatives would further restrict the location of longline fishing, and in the case of the Preferred Alternative, 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 branchlines; potential lost revenue due to potential effects of weak circle hooks on the total weight of tuna caught and revenue generated; additional travel costs (fuel and time) of fishing outside the MHI longline exclusion zone during the time it is currently open to longline fishing, as well as the cost of fishing outside the SEZ (if triggered); and annual cost of Protected Species Workshop certification of operators and owners. Initial, one-time costs would be expected to range from \$2,000 to \$5,000 per business for the 68 businesses owning 1 vessel each, to \$14,000-\$33,000 for the single business owning 6 vessels.

Annual ongoing costs would be expected to range from \$23,000 to \$62,000 per business for the 68 businesses owning 1 vessel each, to \$140,000-\$370,000 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.

The complete closure of the EEZ around Hawaii to longline fishing under Alternative 3 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 EEZ. Annual ongoing costs associated with implementing Alternative 3 range from \$67,000 to \$79,000 per business for the 68 businesses owning 1 vessel each, to \$401,000-\$474,000 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.

No additional reporting, record-keeping, and other compliance requirements are anticipated for small businesses. NMFS has identified no Federal rules that may duplicate, overlap, or conflict with the action alternatives. After careful examination of the best available scientific data on false killer whales, NMFS believes that only the two Action Alternatives have the potential to accomplish the stated objectives and legal mandates associated with the conservation of this species. Retention of the “No Action” alternative is not a viable choice for several reasons. Retaining the No Action alternative would be contrary to the agency’s obligations under the MMPA to reduce fishery impacts on false killer whales to acceptable levels. Additionally, adopting the status quo would not be consistent with the objectives identified by the agency for this action. . Both Alternatives 2 and 3 would meet the objectives of the proposed rule. Alternative 3 was not selected because it would likely result in

substantially greater economic impacts to small entities than the Preferred Alternative, without a greater likelihood of achieving the objectives of the proposed rule.

References Cited

A list of all references cited in this proposed rule may be found on www.regulations.gov and the FKWTRT website (<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

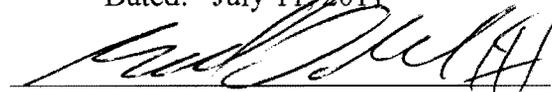
50 CFR Part 229

Administrative practice and procedure, Fisheries, Marine mammals.

50 CFR Part 665

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

Dated: July 11, 2011



Samuel D. Rauch III,

Deputy Assistant Administrator for Regulatory Programs,

National Marine Fisheries Service.

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

CHAPTER II

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

1. The authority citation for 50 CFR part 229 reads as follows:

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

2. In § 229.3, add new paragraphs (v) through (y) 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 § 665.813(k) and (l) of this title.

(w) It is prohibited to fish with longline gear in the Main Hawaiian Islands Longline Fishing Prohibited Area, as defined in § 665.806(c) of this title.

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

(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 paragraph § 229.37(f) of this part.

3. In subpart C, add a new § 229.37 to read as follows:

§ 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, Hawaii insular, and Palmyra Atoll stocks of false killer whales in the Hawaii-based deep-set and

shallow-set 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 of this part, 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) Gear requirements. While deep-setting, the owner and operator of a vessel registered for use under a Hawaii longline limited access permit must comply with the hook, branch line, and leader requirements described in § 665.813(k) and (l) of this title.

(d) Prohibited area management. (1) MHI Longline Fishing Prohibited Area. Longline fishing is prohibited in the MHI Longline Fishing Prohibited Area as defined in § 665.806(c) of this title.

(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 consists of the portion of the EEZ around the Hawaiian Archipelago enclosed by straight lines connecting the following coordinates in the order listed:

Point	N. lat.	W. lon.
L	22° 46.16'	165° 00.00'
M	22° 14.45'	161° 44.38'
E	21° 40.00'	161° 55.00'
D	20° 40.00'	161° 40.00'
C	20° 00.00'	157° 30.00'
B	18° 20.00'	156° 25.00'
A	18° 05.00'	155° 40.00'

N	18° 45.02'	154° 30.00'
and from Point A south along longitude 165° 00' W. until intersecting the EEZ boundary around the Hawaiian Archipelago, and from Point H south along longitude 154° 30' W. until intersecting the EEZ boundary around the Hawaiian Archipelago.		

(e) Southern Exclusion Zone trigger and procedures. (1) Prior to the start of each fishing year, the Assistant Administrator will publish in the Federal Register the expected observer coverage for the fishing year, the potential biological removal level for the Hawaii Pelagic stock of false killer whales, and the associated trigger calculated using the formula in paragraph (e)(2) of this section.

(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 the Hawaiian Archipelago, and that serves as the bycatch threshold for closing the Southern Exclusion Zone to deep-set longline fishing. The trigger is calculated using the formula

$$\text{Trigger} = 5 * (\text{percent observer coverage}) * (\text{potential biological removal})$$

and is rounded down to the nearest whole number.

(3) Unless otherwise subject to subparagraph (e)(4), if there is an observed false killer whale mortality or serious injury in the EEZ around the Hawaiian Archipelago 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-setting until the end of that fishing year.

(4) If during any of the four calendar years 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 U.S. EEZ around the Hawaiian Archipelago, the Southern Exclusion Zone will be closed to deep-set longline fishing until the area is reopened by the Assistant Administrator.

(5) 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 U.S. EEZ around the Hawaiian Archipelago, then NMFS shall immediately convene the False Killer Whale Take Reduction Team.

(6) Upon determining that closing the Southern Exclusion Zone is warranted pursuant to the procedures in paragraphs (e)(1)-(4) 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 beginning at a specified date, which is not earlier than 7 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.

CHAPTER VI

PART 665 — FISHERIES IN THE WESTERN PACIFIC

4. The authority citation for 50 CFR part 665 reads as follows:

Authority: 16 U.S.C. 1801 et seq., or 16 U.S.C. 1361 et seq.

5. In 665.802, add a new paragraph (n) to read as follows:

§ 665.802 Prohibitions.

* * * * *

(n) Fail to comply with hook, leader and branchline requirements while engaged in deep-setting from a vessel registered for use under a Hawaii longline limited access permit issued under §665.801(b) in violation of § 665.813(k) and (l).

* * * * *

6. In § 665.806, revise paragraph (c) to read as follows:

§ 665.806 Longline fishing prohibited area management.

* * * * *

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

Point	N. lat.	W. long.
A	18° 05'	155° 40'
B	18° 20'	156° 25'
C	20° 00'	157° 30'
D	20° 40'	161° 40'
E	21° 40'	161° 55'

F	23° 00'	161° 30'
G	23° 05'	159° 30'
H	22° 55'	157° 30'
I	21° 30'	155° 30'
J	19° 50'	153° 50'
K	19° 00'	154° 05'
A	18° 05'	155° 40'

* * * * *

7. In § 665.813, revise the section heading and add new paragraphs (k) and (l) to read as follows:

§ 665.813 Western Pacific longline fishing requirements.

* * * * *

(k) While deep-setting, owners and operators of vessels registered for use under a Hawaii longline limited access permit must use only hooks meeting the following specifications:

- (1) Circle hooks of size 16/0 or smaller, or equivalent;
- (2) Hook shank composed of round, non-flattened wire, with a wire diameter not to exceed 4.0 mm; and
- (3) Offset not to exceed 10 degrees.

(l) 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).