DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

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[Docket No. 170706630-8209-02]

Fish and Fish Product Import Provisions of the Marine Mammal Protection Act

List of Foreign Fisheries

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

ACTION: Notice of availability.

SUMMARY: NMFS is publishing its final 2017 List of Foreign Fisheries (LOFF), as required by the regulations implementing the Fish and Fish Product Import Provisions of the Marine Mammal Protection Act (MMPA). The final LOFF reflects new information received during the comment period on interactions between commercial fisheries exporting fish and fish products to the United States and marine mammals, and updates and revisions to the draft LOFF. NMFS has classified each commercial fishery on the final LOFF into one of two categories, either “export” or “exempt”, based upon frequency and likelihood of incidental mortality and serious injury of marine mammals likely to occur incidental to each fishery. The classification of a fishery on the final LOFF determines which regulatory requirements will be applicable to that fishery for it to receive a comparability finding necessary to export fish and fish products to the United
States from that fishery. The final LOFF can be found at:

https://www.fisheries.noaa.gov/foreign/international-affairs/list-foreign-fisheries

FOR FURTHER INFORMATION, CONTACT: Nina Young, NMFS F/IASI at Nina.Young@noaa.gov, mmpa.loff@noaa.gov, or 301–427–8383.

SUPPLEMENTARY INFORMATION:

In August 2016, NMFS published a final rule (81 FR 54390; August 15, 2016) implementing the fish and fish product import provisions (section 101(a)(2)) of the MMPA. This rule established conditions for evaluating a harvesting nation’s regulatory programs to address incidental and intentional mortality and serious injury of marine mammals in its fisheries producing fish and fish products exported to the United States.

Under this rule, fish or fish products cannot be imported into the United States from commercial fishing operations that result in the incidental mortality or serious injury of marine mammals in excess of United States standards. Fish and fish products from export and exempt fisheries identified by the Assistant Administrator for Fisheries in the LOFF can only be imported into the United States if the harvesting nation has applied for and received a comparability finding from NMFS. The rule established procedures that a harvesting nation must follow and conditions it must meet to receive a comparability finding for a fishery. The rule also established provisions for intermediary nations to ensure that such nations do not import and re-export to the United States fish or fish products that are subject to an import prohibition.

What is the List of Foreign Fisheries?

Based on information provided by nations, industry, the public, and other readily available sources, NMFS identified nations with commercial fishing operations that
export fish and fish products to the United States and classified each of those fisheries based on their frequency of marine mammal interactions as either “exempt” or “export” fisheries (see definitions below). The entire list of these export and exempt fisheries, organized by nation (or economy), constitutes the LOFF.

Why is the LOFF important?

Under the MMPA, the United States prohibits imports of commercial fish or fish products caught in commercial fishing operations resulting in the incidental killing or serious injury (bycatch) of marine mammals in excess of United States standards (16 U.S.C. 1371(a)(2)). NMFS published regulations implementing these MMPA import provisions in August 2016 (81 FR 54390; August 15, 2016). The regulations apply to any foreign nation with fisheries exporting fish and fish products to the United States, either directly or through an intermediary nation. The LOFF is integral to the implementation of the MMPA import provisions. As described below, the LOFF lists foreign commercial fisheries that export fish and fish products to the United States and that have been classified as either “export” or “exempt” based on the frequency and likelihood of interactions or incidental mortality and serious injury of a marine mammal. A harvesting nation must apply for and receive a comparability finding for each of its export and exempt fisheries to continue to export fish and fish products from those fisheries to the United States. For all fisheries, to

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1 With respect to all references to “nation” or “nations” in the rule, it should be noted that the Taiwan Relations Act of 1979, Pub. L. No. 96-8, Section 4(b)(1), provides that [w]henever the laws of the United States refer or relate to foreign countries, nations, states, governments, or similar entities, such terms shall include and such laws shall apply with respect to Taiwan. 22 U.S.C. § 3303(b)(1). This is consistent with the United States’ one-China policy, under which the United States has maintained unofficial relations with Taiwan since 1979.
receive a comparability finding under this program, the harvesting nation must prohibit intentional killing of marine mammals in the course of commercial fishing operations in the fishery or demonstrate that it has procedures to reliably certify that exports of fish and fish products to the United States were not harvested in association with the intentional killing or serious injury of marine mammals.

What do the classifications of “exempt fishery” and “export fishery” mean?

The classifications of “exempt fishery” or “export fishery” determine the criteria that a nation’s fishery must meet to receive a comparability finding for that fishery. A comparability finding is required for both exempt and export fisheries, but the criteria for exempt and export fisheries differ.

For an exempt fishery, the criteria to receive a comparability finding are limited only to conditions related to the prohibition of intentional killing or injury of marine mammals (see 50 CFR 216.24(h)(6)(iii)(A)). For an export fishery, the criteria to receive a comparability finding include the conditions related to the prohibition of intentional killing or injury of marine mammals (see 50 CFR 216.24(h)(6)(iii)(A)) and the requirement to develop and maintain regulatory programs comparable in effectiveness to the U.S. regulatory program for reducing incidental marine mammal bycatch (see 50 CFR 216.24(h)(6)). The definitions of “exempt” and “export” fishery are below.

What is the five-year exemption period?

NMFS included a five-year exemption period (which began 1 January 2017) in this process to allow foreign harvesting nations time to develop, as appropriate, regulatory programs comparable in effectiveness to U.S. programs at reducing marine mammal bycatch. During this exemption period, NMFS, based on the final LOFF, and in
consultation with the Secretary of State, will consult with harvesting nations with commercial fishing operations identified as export or exempt fisheries for purposes of notifying the harvesting nation of the requirements of the MMPA. NMFS will continue to urge harvesting nations to gather information about marine mammal bycatch in their commercial fisheries to inform the next draft and final LOFF (slated for 2020). NMFS will re-evaluate foreign commercial fishing operations and publish a notice of availability of the draft for public comment, and a notice of availability of the final revised LOFF in the Federal Register the year prior to the expiration of the exemption period (2020).

Based on the information in this final LOFF, in 2019, nations must provide a progress report to NMFS on their efforts to develop monitoring and regulatory programs comparable to the U.S. regulatory program.

If, during the five-year exemption period, the United States determines that a marine mammal stock is immediately and significantly adversely affected by an export fishery, NMFS may use its emergency rulemaking authority to institute an import ban on products from that fishery.

*How did NMFS classify a fishery if a harvesting nation did not provide information?*

Information on the frequency or likelihood of interactions or bycatch in most foreign fisheries was lacking or incomplete. Absent such information, NMFS used readily available information, noted below, to classify fisheries, which included drawing analogies to similar U.S. fisheries and gear types interacting with similar marine mammal stocks. Where no analogous fishery or fishery information exists, NMFS classified the commercial fishing operation as an export fishery until information becomes available to properly classify the fishery. While preparing a revised LOFF, NMFS may reclassify a
fishery if a harvesting nation provides, during the comment period, reliable information to reclassify the fishery or such information is readily available to NMFS.

**Definitions**

*What is a “comparability finding?”*

A comparability finding is a finding by NMFS that the harvesting nation for an export or exempt fishery has met the applicable conditions specified in the regulations (see 50 CFR 216.24(h)) subject to the additional considerations for comparability findings set out in the regulations. A comparability finding is required for a nation to export fish and fish products to the United States. To receive a comparability finding for an export fishery, the harvesting nation must maintain a regulatory program with respect to that fishery that is comparable in effectiveness to the U.S. regulatory program for reducing incidental marine mammal bycatch. This requirement may be met by developing, implementing and maintaining a regulatory program that includes measures that are comparable, or that effectively achieve comparable results, to the regulatory program under which the analogous U.S. fishery operates.

*What is the definition of an “export fishery?”*

The definition of export fishery can be found in the implementing regulations for section 101(a)(2) of the MMPA (see 50 CFR 216.3). NMFS considers “export” fisheries to be functionally equivalent to Category I and II fisheries under the U.S. regulatory program (see definitions at 50 CFR 229.2). The definition of an export fishery is summarized below.

NMFS defines “export fishery” as a foreign commercial fishing operation determined by the Assistant Administrator to be the source of exports of commercial fish
and fish products to the United States that have more than a remote likelihood of incidental mortality and serious injury of marine mammals in the course of its commercial fishing operations.

Where reliable information on the frequency of incidental mortality and serious injury of marine mammals caused by the commercial fishing operation is not provided by the harvesting nation, the Assistant Administrator may determine the likelihood of incidental mortality and serious injury as more than remote by evaluating information concerning factors such as fishing techniques, gear used, methods used to deter marine mammals, target fish species, seasons and areas fished, qualitative data from logbooks or fisher reports, stranding data, the species and distribution of marine mammals in the area, or other factors.

Commercial fishing operations not specifically identified in the current LOFF as either exempt or export fisheries are deemed to be export fisheries until a revised LOFF is posted, unless the harvesting nation provides the Assistant Administrator with information to properly classify a foreign commercial fishing operation not on the LOFF. The Assistant Administrator may also request additional information from the harvesting nation, as well as consider other relevant information about such commercial fishing operations and the frequency of incidental mortality and serious injury of marine mammals, to properly classify the foreign commercial fishing operation.

*What is the definition of an “exempt fishery?”*

The definition of exempt fishery can be found in the implementing regulations for section 101(a)(2) of the MMPA (see 50 CFR 216.3). NMFS considers “exempt” fisheries
to be functionally equivalent to Category III fisheries under the U.S. regulatory program (see definitions at 50 CFR 229.2).

NMFS defines an exempt fishery as a foreign commercial fishing operation determined by the Assistant Administrator to be the source of exports of commercial fish and fish products to the United States that have a remote likelihood of, or no known, incidental mortality and serious injury of marine mammals in the course of commercial fishing operations. A commercial fishing operation that has a remote likelihood of causing incidental mortality and serious injury of marine mammals is one that, collectively with other foreign fisheries exporting fish and fish products to the United States, causes the annual removal of:

(1) Ten percent or less of any marine mammal stock’s bycatch limit, or
(2) More than ten percent of any marine mammal stock’s bycatch limit, yet that fishery by itself removes one percent or less of that stock’s bycatch limit annually, or
(3) Where reliable information has not been provided by the harvesting nation on the frequency of incidental mortality and serious injury of marine mammals caused by the commercial fishing operation, the Assistant Administrator may determine whether the likelihood of incidental mortality and serious injury is “remote” by evaluating information such as fishing techniques, gear used, methods to deter marine mammals, target fish species, seasons and areas fished, qualitative data from logbooks or fisher reports, stranding data, the species and distribution of marine mammals in the area, or other factors at the discretion of the Assistant Administrator.
A foreign fishery will not be classified as an exempt fishery unless the Assistant Administrator has reliable information from the harvesting nation, or other information, to support such a finding.

**Developing the 2017 List of Foreign Fisheries**

*How is the List of Foreign Fisheries organized?*

NMFS organized the LOFF by harvesting nation (or economy). Each harvesting nation’s LOFF may include “exempt fisheries,” “export fisheries,” and “export fisheries with no information”. The fisheries listing includes defining factors including geographic location of harvest, gear-type, target species, or a combination thereof. Where known, the LOFF also includes a list of the marine mammals that interact with each commercial fishing operation, and, when available, indicates the level of incidental mortality and serious injury of marine mammals in each commercial fishing operation.

*What sources of information did NMFS use to classify the commercial fisheries included in the LOFF?*

NMFS reviewed and considered documentation provided by nations; the public; and other sources of information, where available, including fishing vessel records; reports of on-board fishery observers; information from off-loading facilities, port-side government officials, enforcement entities and documents, transshipment vessel workers and fish importers; government vessel registries; regional fisheries management organization (RFMO) or intergovernmental agreement documents, reports, national reports, and statistical document programs; appropriate catch certification programs; Food and Agricultural Organization (FAO) documents and profiles; and published literature and reports on commercial fishing operations with intentional or incidental
mortality and serious injury of marine mammals. NMFS has used these sources of information and any other readily available information to classify the fisheries as “export” or “exempt” fisheries to develop the LOFF.

**How did NMFS obtain the information used to classify fisheries in the LOFF?**

First, NMFS identified imports of fish and fish products by nation using the U.S. foreign trade database for commercial fisheries imports found at: [http://www.st.nmfs.noaa.gov/commercial-fisheries/foreign-trade/](http://www.st.nmfs.noaa.gov/commercial-fisheries/foreign-trade/). Second, in December 2016, NMFS notified in writing each nation with commercial fishing or processing operations that export fish or fish products to the United States to request that within 90 days of notification, by April 1, 2017, the nation submit information about commercial fishing or processing operations. NMFS included in that notification a list of fish and fish products imported into the United States from that nation during the past several years.

For commercial fishing operations, NMFS requested information on the number of participants, number of vessels, gear type, target species, area of operation, fishing season, and any information regarding the frequency of marine mammal incidental mortality and serious injury, including programs to assess marine mammal populations or bycatch. NMFS also requested that nations submit copies of any laws, decrees, regulations, or measures to reduce incidental mortality and serious injury of marine mammals in their commercial fishing operations or prohibit the intentional killing or injury of marine mammals.

NMFS also evaluated information submitted by the nations and the public in response to the *Federal Register* Notice (82 FR 2961; January 10, 2017) seeking information on foreign commercial fishing operations that export fish and fish products to
the United States and the frequency of incidental and intentional mortality and serious injury of marine mammals in those fisheries.

Based on these information sources, NMFS developed and published a draft LOFF in the Federal Register for public comment (82 FR 39762; August 22, 2017). NMFS revised the draft LOFF based on public comments and information nations submitted during the comment period.

*How did NMFS determine which species or stocks are included as incidentally or intentionally killed or seriously injured in a fishery?*

The LOFF includes a list of marine mammal species and/or stocks incidentally or intentionally killed or injured in a commercial fishing operation. The list of species and/or stocks incidentally or intentionally killed or injured includes “serious” and “non-serious” documented injuries and interactions with fishing gear, including interactions such as depredation.

NMFS reviewed information submitted by nations and readily available scientific information including co-occurrence models demonstrating distributional overlap of commercial fishing operations and marine mammals to determine which species or stocks to include as incidentally or intentionally killed or injured in or interacting with a fishery. NMFS also reviewed, when available, injury determination reports, bycatch estimation reports, observer data, logbook data, disentanglement network data, fisher self-reports, and the information referenced in the definition of exempt and export fishery (see above or 50 CFR 216.3).

*How often will NMFS revise the List of Foreign Fisheries?*
NMFS will re-evaluate foreign commercial fishing operations and publish in the *Federal Register* the year prior to the expiration of the exemption period (2020), a notice of availability of the draft for public comment and a notice of availability of the final revised LOFF. NMFS will revise the final LOFF, as appropriate, and publish a notice of availability in the *Federal Register* every four years thereafter. In revising the list, NMFS may reclassify a fishery if new, substantive information indicates the need to re-examine and possibly reclassify a fishery. After publication of the LOFF, if a nation wishes to commence exporting fish and fish products to the United States from a fishery not currently included in the LOFF, that fishery will be classified as an export fishery until the next LOFF is published and will be provided a provisional comparability finding for a period not to exceed twelve months. If a harvesting nation can provide the reliable information necessary to classify the commercial fishing operation at the time of the request for a provisional comparability finding or prior to the expiration of the provisional comparability finding, NMFS will classify the fishery in accordance with the definitions. The provisions for new entrants are discussed in the regulations implementing section 101(a)(2) of the MMPA (see 50 CFR 216.24(h)(8)(vi)).

*How can a classification be changed?*

To change a fishery’s classification, nations or other interested stakeholders must provide observer data, logbook summaries (preferably over a five-year period), or reports that specifically indicate the presence or absence of marine mammal interactions, quantify such interactions wherever possible, provide additional information on the location and operation of the fishery, details about the gear type and how it is used, maps showing the distribution of marine mammals and the operational area of the fishery;
information regarding marine mammal populations and the biological impact of that fishery on those populations, and/or any other documentation that clearly demonstrates that a fishery is either an export or exempt fishery. Data from independent onboard observer programs documenting marine mammal interaction and bycatch is preferable. Such data can be summarized and averaged over at least a five-year period and include information on the observer program including the percent coverage, number of vessels and sets or hauls observed. Nations should also indicate whether bycatch estimates from observer data are observed minimum counts or extrapolated estimates for the entire fishery. Nations submitting logbook information should include details about the reporting system, including examples of forms and requirements for reporting.

The Intersection of the LOFF and Other Statutes Certifying Bycatch

What is the relationship between the MMPA import rule, the LOFF, and the affirmative finding process for yellowfin tuna purse seine fisheries in the eastern tropical Pacific Ocean?

Dolphin (family Delphinidae) incidental mortality and serious injury in eastern tropical Pacific yellowfin tuna purse seine fisheries are covered by section 101(a)(2)(B) and Title III of the MMPA (16 U.S.C. 1371(a)(2)(B) and 16 U.S.C. 1411–1417), implemented at 50 CFR 216.24(a)–(g). Nations must still comply with those provisions and receive an affirmative finding in order to export tuna to the United States. Tuna purse seine fishing vessels fishing for tuna with a carrying capacity of 400 short tons or greater that are governed by the Agreement for the International Dolphin Conservation Program (AIDCP) are not included in the LOFF, and are not required to apply for and receive a comparability finding. Purse seine vessels under 400 short tons and vessels using all other
gear types operating in the eastern tropical Pacific must comply with the MMPA import rule. These fisheries are included in the LOFF and must apply for and receive a comparability finding.

What is the intersection of the U.S. shrimp certification program (Section 609 of Public Law 101-162) with the MMPA import rule?

Section 609 of Public Law 101–162 ("Sec. 609") prohibits imports of certain categories of shrimp unless the President certifies to the Congress by May 1, 1991, and annually thereafter, that either: (1) the harvesting nation has adopted a program governing the incidental taking of sea turtles in its commercial shrimp fishery comparable to the program in effect in the United States and has an incidental take rate comparable to that of the United States; or (2) the particular fishing environment of the harvesting nation does not pose a threat of the incidental taking of sea turtles. On May 1, 2017, the Department of State certified that 13 shrimp-harvesting nations and 4 fisheries have a regulatory program comparable to that of the United States governing the incidental taking of the relevant species of sea turtles in the course of commercial shrimp harvesting and that the particular fishing environments of 26 shrimp-harvesting nations, one economy, and three fisheries do not pose a threat of the incidental taking of covered sea turtles in the course of such harvesting (83 FR 21295 May 5, 2017). All nations exporting wild-caught shrimp and shrimp products to the United States, regardless of whether they are certified under this provision, must also comply with the MMPA import rule, be included on the LOFF, and have a comparability finding. Nations in compliance with the MMPA import rule, but not certified under Public Law 101-162, cannot export wild-caught shrimp to the United States.
Classification Criteria, Rationale, and Process used to Classify Fisheries

Process when Incidental Mortality and Serious Injury Estimates and Bycatch Limits Are Available

If estimates of the total incidental mortality and serious injury were available and a bycatch limit calculated for a marine mammal stock, NMFS used the quantitative and tiered analysis to classify foreign commercial fishing operations as export or exempt fisheries under the category definition within 50 CFR 229.2 and the procedures used to categorize U.S. fisheries as Category I, II, or III, at https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-protection-act-list-fisheries.

Process When Only Incidental Mortality and Serious Injury Estimates Were Available

In most cases, however, NMFS either did not receive any information or found that the information provided was incomplete, lacking detail regarding marine mammal interactions, and/or lacking quantitative information on the frequency of interactions. Where nations provided estimates of bycatch or NMFS found estimates of bycatch in published literature, national reports, or through other readily available sources, NMFS classified the fishery as an export fishery if the information indicated that there was a likelihood that the mortality and serious injury was more than remote. The code or designation in the LOFF for the determination “presence of bycatch” is recorded as “P” in the LOFF.

Alternative Approaches When Estimates of Marine Mammal Bycatch Are Unavailable

Because bycatch estimates are lacking for most fisheries, NMFS relied on three considerations to assess the likelihood of bycatch or interaction with marine mammals,
including: (1) co-occurrence, the spatial and seasonal distribution and overlap of marine mammals and fishing operations; (2) analogous gear, evaluation of records of bycatch and assessment of risk, where such information exists, in analogous U.S. and international fisheries or gear types; and (3) overarching classifications, evaluation of gears and fishing operations and their risk of marine mammal bycatch (see section below for further discussion). Published scientific literature provides numerous risk assessments of marine mammal bycatch in fisheries, routinely using these approaches to estimate marine mammal mortality rates, identify information gaps, set priorities for conservation, and transfer technology for deterring marine mammals from gear and catch. Findings from the most recent publications cited in this Federal Register notice, often demonstrate level of risk by location, season, fishery, and gear. A summary of the information used to support the designations described below is available in the annotated bibliography and the expanded LOFF with references and comments, at


Co-occurrence Evaluation

The co-occurrence of marine mammal populations with a commercial fishing operation can be a measure of risk. NMFS evaluated, when available, the distribution and spatial overlap of marine mammal populations and commercial fishing operations to determine whether the probability for marine mammal interactions or bycatch in that fishery is more than remote. Resources that NMFS used to consider co-occurrence include OBIS-SEAMAP http://seamap.env.duke.edu/,

http://www.hsi.org/assets/pdfs/mapping_marine_mammals.pdf and

pdf. Additional sources in peer reviewed literature that document co-occurrence are Komoroske & Lewison 2015; FAO 2010; Watson et al., 2006; Read et al., 2006; Reeves et al., 2004. The code or designation for “co-occurrence” is recorded as “C/O” in the LOFF.

Analogous Gear Evaluation

Where a nation did not provide documentation or information was not readily available on the amount of marine mammal bycatch in a fishery or the co-occurrence, NMFS classified a fishery as exempt or export by analogy to similar U.S. or international fisheries and gear types interacting with similar marine mammal stocks. NMFS consulted the United States’ domestic MMPA List of Fisheries found at: http://www.nmfs.noaa.gov/pr/interactions/fisheries/2017_list_of_fisheries_lof.html when classifying international fisheries by analogy. NMFS also evaluated other relevant information including, but not limited to fishing techniques, gear used, methods used to deter marine mammals, target fish species, seasons and areas fished, qualitative data from logbooks or fisher reports, stranding data, the species and distribution of marine mammals in the area, or other factors. The code or designation for the determination “analogous gear” is recorded as “A/G” in the LOFF. Gear types commonly used in U.S. fisheries, such as longline, gillnet, purse seine, trawl, and pot/trap, were identified as “analogous gear” in the justification section of the LOFF. Gear types not commonly used in U.S. waters, such as Danish seine, ring nets, lift nets or large pound nets off Southeast Asia, however, could not be compared to an analogous gear or fishery in the United States.

Classification in the Absence of Information
When no analogous gear, fishery, or fishery information existed, or insufficient information was provided by the nation, and information was not readily available, NMFS classified the commercial fishing operation as an export fishery per the definition of “export fishery” at 50 CFR 216.3. These fishing operations will remain classified as export fisheries until the harvesting nation provides the reliable information necessary to classify properly the fishery or, in the course of revising the LOFF, such information becomes readily available to NMFS. The code or designation for the determination “no information” is recorded as “N/I” in the LOFF.

Multiple Codes and Additional Terms in the LOFF

In some cases, NMFS recorded multiple codes as the rationale for a fishery classification. For example, NMFS may have received insufficient information from a nation, still lacks information in some columns, yet classified the fishery by analogy. In that instance, the codes used to classify the fishery would be: “N/I, A/G.”

Additional terms in the LOFF include “none provided,” “no information,” and “none documented.” “None provided” indicates the nation did not provide information and no information could be found through research and literature searches. “None documented” indicates that neither the nation nor reference material have documented interactions with marine mammals either through observers or logbooks. “No information” indicates that though the nation provided relevant information about the fishery, it did not provide specific information and documentation on the marine mammal species interactions for that fishery or estimates of marine mammal bycatch.

Global classifications for some fishing gear types:
Due to a lack of information about marine mammal bycatch, NMFS used gear types to classify fisheries as either export or exempt. Based on this information, NMFS reclassified some fisheries in the final LOFF. The detailed rationale for these classifications by gear type were provide in the Federal Register Notice for the draft LOFF (82 FR 39762; August 22, 2017) and are summarized here. In the absence of specific information showing a remote likelihood of marine mammal bycatch in a particular fishery, NMFS classified fisheries using these gear types as export, exceptions to those classifications are included in the discussion below.

NMFS classified as export all trap and pot fisheries because the risk of entanglement in float/buoy lines and groundlines is more than remote, especially in areas of co-occurrence with large whales. However, NMFS classified as exempt trap and pot fisheries operating in the Gulf of Mexico and Caribbean due to the low co-occurrence with large whales in this region and an analogous U.S. Category III mixed species and lobster trap/pot fishery operating in the Gulf of Mexico and Caribbean. NMFS classifies as exempt small-scale fish, crab, and lobster pot fisheries using mitigation strategies to prevent large whale entanglements, including seasonal closures during migration periods, ropeless fishing, and vertical line acoustic release technology.

NMFS has classified as export longline gear and troll line fisheries because the likelihood of marine mammal bycatch is more than remote. However, NMFS classified as exempt longline and troll fisheries with demonstrated bycatch rates that are less than remote or an analogous U.S. Category III fishery operating in the area where the fishery occurs. The entanglement rates from marine mammals depreating on longline fisheries is largely unknown. NMFS classifies as exempt snapper/grouper bottom-set longline
fisheries operating in the Gulf of Mexico and the Caribbean because they are analogous to U.S. Category III bottom-set longline gear operating in these areas. NMFS also classifies as exempt longline fisheries using a cachalotera system which prevents and, in some cases, eliminates marine mammal hook depredation and entanglement.

NMFS uniformly classified as export all gillnet, driftnet, set net, and pound net fisheries because the likelihood of marine mammal bycatch in this gear type is more than remote. No nation provided evidence that the likelihood of marine mammal bycatch in a gillnet fishery was less than remote.

NMFS classified as export purse seine fisheries unless the fishery is operating under an RFMO that has implemented conservation and management measures prohibiting the intentional encirclement of marine mammals by a purse seine. In those instances, NMFS classifies the purse seine fisheries as exempt because the evidence suggests that, where purse seine vessels do not intentionally set on marine mammals, the likelihood of marine mammal bycatch is generally remote. However, if there is documentary evidence that a nation’s purse seine fishery continues to incidentally kill or injure marine mammals despite such a prohibition, NMFS classified the fishery as an export fishery. Similarly, if any nation demonstrated that it had implemented a measure prohibiting the intentional encirclement of marine mammals by a purse seine vessel, that fishery would be designated as exempt, absent evidence that it continued to incidentally kill or injure marine mammals.

NMFS has classified as export all trawl fisheries, including bream trawls and otter trawls, because the marine mammal bycatch in this gear type is more than remote, and this gear type often co-occurs with marine mammal stocks. However, the krill trawl
fishery operating under changes to Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) in subareas 48.1-4 of CCAMLR is classified as exempt due to the conservation and management measure requiring marine mammal excluding devices and levels of marine mammal mortalities that are less than ten percent of the bycatch limit/PBR for marine mammal stocks that interact with that fishery.

There are several gear types that NMFS classified as exempt because they are highly selective, have a remote likelihood of marine mammal bycatch, and have analogous U.S. Category III fisheries. These gear types are: hand collection, diving, manual extraction, hand lines, hook and line, jigs, dredges, clam rakes, beach-operated hauling nets, ring nets beach seines, lift nets, cast nets, bamboo weir, and floating mats for roe collection.

NMFS classified Danish seine fisheries as exempt based on the remote likelihood of marine mammal bycatch because of a lack of documented interactions with marine mammals. The exception are Danish seine fisheries with documentary evidence of marine mammal interactions, which NMFS classified as export.

Finally, NMFS classified as exempt most forms of aquaculture, including lines and floating cages, unless documentary evidence indicates marine mammal interactions or entanglement, particularly of large whale entanglement in aquaculture seaweed or shellfish lines, or nations that permit aquaculture facilities to intentionally kill or injure marine mammals.

Summary

NMFS reviewed information from or related to more than 160 trading partners. NMFS eliminated 25 nations from the LOFF (see Table 1 in the Federal Register notice--
Fish and Fish Product Import Provisions of the Marine Mammal Protection Act List of Foreign Fisheries 82 FR 39762; August 22, 2017). The final LOFF is composed of 910 exempt and 2,386 export fisheries from 138 nations (or economies). The LOFF, an expanded LOFF containing references, a list of Intermediary nations (or economies) and their associated products, and a list of fisheries and nations where the rule does not apply can found at:


An annotated bibliography with supporting references can be found at:


General Trends in the LOFF

Gillnets represent the vast majority of the export fisheries with documented marine mammal bycatch. Mitigation measures for gillnets are few. Active sound emitters such as “pingers” are used in gillnet fisheries to reduce small cetacean bycatch. However, pingers are not effective for all small cetacean species and may be less effective in operational fisheries than research programs (Dawson et al., 2013). Given the limited mitigation options, nations should consider swapping gillnets for other non-entangling gear, where there is overlap between the fishery and marine mammal populations.

The LOFF highlighted the clear need for bycatch monitoring programs to better estimate marine mammal bycatch and to identify where mitigation efforts are most needed. For example, several nations recommended that longline and purse seine fisheries be classified as exempt fisheries because there are few interactions with marine mammals. However, the logbook and observer data NMFS received did not substantiate that the likelihood of bycatch in these fisheries is remote.
NMFS believes accurate classification of longline fisheries, especially for tuna, and purse seine fisheries for pelagic species would benefit from monitoring programs (e.g., observer programs) or analyses of observer and logbook programs to assess the bycatch rates associated with these gear types. RFMOs are well-situated to evaluate marine mammal bycatch rates in tuna and swordfish longline fisheries. Information from these sources could be used to determine whether the likelihood of marine mammal bycatch is remote. Nations should strongly consider bycatch monitoring programs as a core element in any regulatory program and a key to the appropriate classification of their fisheries.

Impact of the LOFF on Largest Trading Partners by Volume and Value

Table 1 contains the twenty largest exporters to the United States by volume and value, an assessment of their data quality, and their risk of marine mammal bycatch. NMFS based its assessment of data quality on the completeness and detail of the information each nation provided. The number of export and exempt fisheries is the tally in the final LOFF. The overall risk of marine mammal bycatch is based on the type of gear most prevalent in the nation’s fisheries and available information on marine mammal fisheries interactions.

Chile, Peru, Argentina, and Ecuador have large numbers of small gillnet, purse seine, and trawl vessels with marine mammal bycatch. Canada’s pot fisheries for lobster and snow crab have high levels of large whale bycatch. Canada also has bycatch in its gillnet fisheries and permits the intentional killing of marine mammals in aquaculture operations. Indonesia, Thailand, and Vietnam have large processing and aquaculture sectors. These nations also have gillnet fisheries; however, their fisheries are poorly
monitored, making accurate bycatch estimates and the development of mitigation measures for marine mammal bycatch difficult. NMFS may be able to reclassify these fisheries as exempt in the next iteration of the LOFF if these nations estimate their marine mammal bycatch or provide detailed information about their fishery operations.

Japan’s marine mammal bycatch is particularly large in its pound net fisheries, whereas the Russia’s bycatch is likely in its pot and trawl fisheries. Mexico’s marine mammal bycatch includes its gillnet and trawl fisheries in the Gulf of Mexico and the Gulf of California. India’s fishery bycatch is predominantly in its coastal gillnet fisheries, which include thousands of vessels. Taiwan has bycatch in its longline fisheries and drift gillnet fisheries. The United Kingdom has bycatch of harbor porpoise and common dolphins in gillnet and trawl fisheries. Russia and China provided little to no information to enable a full assessment of their fisheries and level of marine mammal risk.

Nations, some not included in this table, with high levels of documented marine mammal bycatch include South Korea (pound nets and gillnets); New Zealand (all gear types, especially trawl); and Australia (trawl and longline). However, NMFS recognizes that this evaluation may be influenced by the advanced assessment capabilities of these nations. New Zealand, Norway, and South Korea may be the only nations to have currently calculated a bycatch limit. Norway’s information demonstrates that bycatch in its gillnet fisheries of harbor porpoise, gray seal, and harbor seal exceed the bycatch limits calculated for these species. South Korea, also has bycatch of several species of marine mammals in gillnet fisheries that exceed the bycatch limit.

Table 1. List of the twenty largest exporting nations by volume and value and an assessment of the data they provided and their risk of marine mammal bycatch.
<table>
<thead>
<tr>
<th>Nation</th>
<th>Quality of Data Supplied</th>
<th>Number of Export/Exempt Fisheries</th>
<th>Overall risk of Marine Mammal Bycatch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>Excellent</td>
<td>227/122</td>
<td>Average/High</td>
</tr>
<tr>
<td>China</td>
<td>Poor</td>
<td>107/4</td>
<td>Unknown</td>
</tr>
<tr>
<td>Indonesia</td>
<td>Fair</td>
<td>11/25</td>
<td>Low</td>
</tr>
<tr>
<td>Thailand</td>
<td>Fair</td>
<td>15/18</td>
<td>Average</td>
</tr>
<tr>
<td>Chile</td>
<td>Good</td>
<td>40/43</td>
<td>Average/High</td>
</tr>
<tr>
<td>India</td>
<td>Poor</td>
<td>13/3</td>
<td>High</td>
</tr>
<tr>
<td>Vietnam</td>
<td>Fair</td>
<td>20/14</td>
<td>Low/Average</td>
</tr>
<tr>
<td>Ecuador</td>
<td>Good</td>
<td>18/6</td>
<td>High</td>
</tr>
<tr>
<td>Mexico</td>
<td>Fair</td>
<td>31/29</td>
<td>Average</td>
</tr>
<tr>
<td>Russia</td>
<td>Poor</td>
<td>109/1</td>
<td>Average/High</td>
</tr>
<tr>
<td>Japan</td>
<td>Poor</td>
<td>89/83</td>
<td>High</td>
</tr>
<tr>
<td>Philippines</td>
<td>Good</td>
<td>14/6</td>
<td>Low</td>
</tr>
<tr>
<td>Peru</td>
<td>Good</td>
<td>69/26</td>
<td>Average/High</td>
</tr>
<tr>
<td>Argentina</td>
<td>Good</td>
<td>20/13</td>
<td>Average</td>
</tr>
<tr>
<td>Iceland</td>
<td>Excellent</td>
<td>27/5</td>
<td>Average</td>
</tr>
<tr>
<td>Honduras</td>
<td>Poor</td>
<td>4/6</td>
<td>Unknown</td>
</tr>
<tr>
<td>Taiwan</td>
<td>Good</td>
<td>13/4</td>
<td>Average/High</td>
</tr>
<tr>
<td>South Korea</td>
<td>Excellent</td>
<td>94/58</td>
<td>High</td>
</tr>
<tr>
<td>New Zealand</td>
<td>Excellent</td>
<td>77/25</td>
<td>Average/High</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Good</td>
<td>44/10</td>
<td>Average/High</td>
</tr>
</tbody>
</table>

**Response to Comments and Changes from the Draft LOFF**

NMFS received more than 35 comment letters on the draft LOFF for 2017 (82 FR 39762; August 22, 2017). Most of the comments were submitted by nations. Several non-governmental organizations (NGO) and industry groups also submitted comments (see general comments below), all of which are summarized below.

Several comments received were not germane to the draft LOFF and are not addressed in this section. These comments include references to actions outside the scope of the statutory mandate or actions covered under other rulemakings. Comments received

In the following section, NMFS summarizes and responds to the comments applicable to the LOFF. NMFS organized the summary and response to comments as follows: (1) changes to the LOFF and observations that apply to all nations (or economies), (2) comments and changes to the LOFF by nation (or economy), (3) general comments not associated with a nation (e.g., public, NGOs, industry), and (4) responses to questions posed in the draft LOFF (see 82 FR 39762, August 22, 2017)

(1) Overview of Comments Received and Changes Made to the LOFF

Nations Failing to Respond

More than 64 nations (or economies) did not respond to the request for public comment on the draft LOFF. These nations (or economies) include: The Bahamas, Bahrain, Bangladesh, Barbados, Benin, Brazil, British Virgin Islands, Brunei, Cameroon, Cape Verde, China, Croatia, Dominican Republic, Ecuador, Egypt, El Salvador, Federated States of Micronesia, Fiji, French Polynesia, The Gambia, Ghana, Grenada, Guinea, Guyana, Haiti, Honduras, Iran, Israel, Ivory Coast, Kenya, Kiribati, Liberia, Libya, Maldives Islands, Marshall Islands, Mauritania, Mozambique, Namibia, Nicaragua, Nigeria, Palau, Papua New Guinea, Peru, Reunion, Russia, Saudi Arabia, Senegal, Sierra Leone, South Africa, Sri Lanka, Saint Kitts Nevis, Saint Lucia, Saint Pierre Miquelon, Saint Vincent Grenadine, Tanzania, Tonga, Turkey, Turks and Caicos Islands, Ukraine, United Arab Emirates, Vanuatu, Venezuela, and Western Samoa. As a result, the fishery classifications for these nations (or economies) remain unchanged. Failure of these nations (or economies) to provide information regarding fisheries for which NMFS has none may result in a relatively high percentage of export fisheries
among this group. This is also the case for several other nations (or economies) that did respond to the request for comment but did not provide information on fisheries under the category “export fishery with no information.” The category “export fishery with no information” includes products exported by nations (or economies) for which NMFS has been unable to find information (e.g., gear type and area of operation), and fisheries with documented marine mammal bycatch associated with a nation and gear type but for which no target species of fish or fish products was identified. NMFS urges nations to provide the information that is lacking and as much detail as possible about the fishery, its operational characteristics, and its interactions with marine mammals, including applicable references. It is in the interest of nations (or economies) to provide the requested information because it allows NMFS to determine whether the MMPA import rule applies to all of the fish and fish products exported to the United States or only to a particular fishery or fisheries, whether the nation is only a processor of that fish or fish product, and, if a harvester of that fish or fish product, what fishery classification is appropriate.

Changes to CCAMLR Fisheries

For fisheries operating in the CCAMLR Convention Area, NMFS made the following changes: Fisheries for krill in the Antarctic Peninsula region have been combined into a single fishery pursuant to CCAMLR Conservation Measure 51-01, which manages krill fisheries in Subareas 48.1-4. This consolidation applies to the following nations fishing for krill in the CCAMLR Convention Area: Chile, China, Japan, Norway, Poland, Russia, Republic of Korea, and Ukraine. NMFS changed the classification for these fisheries from export to exempt because all trawl fisheries
operating in CCAMLR are required to use marine mammal excluding devices (for krill fisheries: CM 51-01, paragraph 7: “Mitigation”). Additionally, the bycatch limit for seals in this region has been calculated at 88,200 individuals (see comments from Norway below) and the estimated incidental mortality and serious injury for all krill fisheries operating in CCAMLR is less than ten percent of the bycatch limit, making these fisheries exempt.

For nations with toothfish longline fisheries operating in both Subarea 88.1 and 88.2, NMFS combined these fisheries into one fishery. Toothfish longline fisheries operating in the CCAMLR convention area are required to carry one observer appointed in accordance with the CCAMLR Scheme of International Scientific Observation and, where possible, one additional scientific observer. Based on the observer and logbook information in the working group and Secretariat reports, toothfish longline fisheries with no documented interactions in CCAMLR were classified as exempt. NMFS classified as export toothfish longline fisheries with documented interactions, including bycatch and depredation.

Icefish and toothfish trawl fisheries operating in the CCAMLR convention area are subject to the same observer requirements. Therefore, NMFS classified as exempt icefish and toothfish trawl fisheries with no document marine mammal bycatch.

(2) Summary of Changes to LOFF Based on Information from Nations (or Economies) and Comments and Responses
Antigua and Barbuda

Upon further review of fish and fish product imports to the United States from Antigua and Barbuda over the last 17 years, NMFS removed squid and scallops from the category “export fisheries with no information.” Each product was imported only once,
squid in 2000, and scallops in 2009. Additionally, NMFS could not find recognized commercial fisheries in the available literature, management plans for these products, or any evidence this product is processed by this nation. Therefore, these products are likely re-exports and have been removed from the final LOFF.

Argentina

Changes to the Argentine export fisheries based on the information Argentina provided include combining into one export fishery: toothfish longline fisheries operating in CCAMLR subareas 88.1 and 88.2; and toothfish longline and trawl fisheries operating off the coast of Tierra del Fuego, the Isla de los Estados and off the province of Buenos Aires; and all Argentine hake bottom trawl vessels (35 coastal, 183 freezer, and 98 refrigerated high-seas vessels) operating in the provinces of Chubut, Santa Cruz, and Rio Negro.

Additionally, NMFS removed from the LOFF the following export fisheries: the Argentine hake gillnet fishery; the tadpole lingcod (Patagonian cod) bottom trawl fishery; Patagonian blenny gillnet, trammel net, and purse seine fisheries; silver warehou and Argentine goatfish trawl fisheries; and Sao Paolo squid and Penaeid shrimp trammel nets and bottom trawl and squid bottom trawl, because these fisheries are artisanal fisheries for domestic consumption.

NMFS also changed the midwater and bottom trawl fisheries and surrounding net fisheries for blue grenadier to bottom trawl fishery for Patagonia grenadier; added Atlantic bonito, Argentine short-fin squid, and silversides trawl fisheries to the demersal coastal trawl fisheries; and combined all Argentine red shrimp bottom net outrigger
vessel types into one fishery. NMFS removed from the LOFF the artisanal trammel net, as the gear type is not used for this species.

Australia

Changes made to Australian fisheries include clarification of multispecies fisheries and their associated gear types and vessel numbers. NMFS changed the multispecies and garfish hauling net fishery operating in New South Wales from export to exempt because this fishery is analogous to the Category III, U.S. beach seine fishery. The gear is deployed solely from beaches limiting the probability of co-occurrence with and bycatch of marine mammals.

NMFS changed the New South Wales eastern rock lobster trap from export to exempt; this fishery uses an at-call acoustic release system (Galvanic Time Release (GTR)) that submerges the head-gear of the trap and has been effective in eliminating marine mammal entanglements. NMFS also changed the giant crab pot fishery and the rock lobster pot fishery in Southern Australia from export to exempt because these fisheries operate solely during the summer months and close during the winter months when whales migrate through the region, significantly reducing the likelihood of entanglement.

Finally, NMFS changed from export to exempt the South Australian sardine purse seine fishery. In this fishery, Australia requires, as part of the mandatory Code of Practice, the delayed setting of nets if marine mammals are present in the area, and immediate release and safe handling practices if a mammal is detected in the net. A fisheries-independent observer program monitors the effectiveness of this practice and an annual report is generated on bycatch levels for the fishery. This practice is comparable
to the RFMO conservation and management measure prohibiting the intentional
encirclement of marine mammals by tuna purse seine fisheries; for this reason this fishery
has been changed to exempt.

Under the category “Export Fisheries with No Information” NMFS removed the
fishery for grouper because further analysis of imports from Australia for the preceding
17 years indicates only 2 years of small-scale and intermittent trade of grouper with the
last import being 770 kg in 2015. Likewise, lobster (Homerus spp.) was also removed as
this was likely a reporting error. Live lobsters received from Australia are rock lobster
and would not be North Atlantic lobster species.

Australia Comment 1: Australia recommended removing humpback whale and
southern right whale entanglements from the Western Australia rock lobster pot fishery.

Response: NMFS cross-checked these numbers against what was reported to the
International Whaling Commission (IWC) for 2012 and 2015. The entanglement numbers
were corrected against what was reported to the IWC for 25 humpback whales (23
individuals in 2012 and 3 individuals in 2015) and two southern right in 2012. Absent
documentary evidence that these entanglements were not the result of this fishery, best
available information indicates that these bycatch estimates remain associated with the
Western Australia rock lobster pot fishery.

Australia Comment 2: Australia commented on reported bycatch from the
Geelong Star, a midwater trawling vessel for small pelagics. Australia asserted that the
bycatch associated with this vessel was incorrectly applied to the southern bluefin tuna
purse seine fishery. Australia further asserted that reports from the fishing actions of the
Geelong Star, a ship flagged to another nation, should not have been included in the draft LOFF.

Response: NMFS agrees because Australia has corrected the administrative record associated with the LOFF.

Australia Comment 3: Australia maintains that all Australian fisheries that export product must meet the rigorous legislative requirements set out under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). The EPBC Act assessment process means that all export fisheries must meet minimum requirements for ecologically sustainable management before they are accredited to export under Australian law. The effect of the EPBC Act is to pursue a policy on marine mammal bycatch that seeks to eliminate, to the furthest practicable extent, marine mammal interactions in Australian export fisheries through monitoring, reporting and mitigation measures to avoid killing or injuring marine mammals. The EPBC Act applies to all Australian export fisheries, whether they are a Commonwealth, state or a Northern Territory fishery. The Australian Government believes that an alternative to the United States assessing each Australian export fishery individually could be to assess whether the requirements of the EPBC Act are sufficient to meet the requirements of the U.S. MMPA import rule to determine whether the two systems are comparable in effectiveness.

Response: NMFS is amenable to working with Australia in determining the most appropriate method for Australia’s fisheries to achieve a comparability finding determination under the MMPA import rule.
**Australia comment 4:** Australia commented on the use of co-occurrence and analogous gear type as a basis for classifying fisheries as “export.” Australia does not agree with this classification system. Australia indicated fisheries with no or low levels of reported marine mammal interactions and that the gear types used, in conjunction with the locations of these fisheries, justifies finding a remote likelihood of interaction; therefore, Australia asserted these fisheries should be classified exempt.

**Response:** NMFS appreciates Australia’s viewpoint and the information it provided on its fisheries. Without more detailed information, including summaries of logbook or observer data for these fisheries, rationale for why the gear cannot or does not interact with marine mammals, or information on the lack of co-occurrence, NMFS does not find adequate rationale to reclassify these fisheries.

**Australia comment 5:** Australia commented that they were unclear why the CCAMLR toothfish fisheries were split and questioned from where additional interactions data was obtained.

**Response:** The toothfish fisheries are split by fishing area and by gear type. Based on public comment, NMFS has now combined the fisheries for toothfish operating in subareas 88.1 and 88.2. The data on marine mammal interactions in these fisheries before 2012 was obtained from published CCAMLR reports of fishery bycatch.

**Australia comment 6:** For the Commonwealth prawn fishery and tuna longline fishery, Australia considers the number of reported marine mammal interactions over the reported five-year period to indicate a remote likelihood of interaction and therefore exempt status.
Response: NMFS classified these fisheries based on analogous gear types in U.S. fisheries and historic interactions in these Australian fisheries. Several prawn fisheries have documented interactions with marine mammals such that the likelihood of incidental mortality and serious injury is more than remote. Marine mammals interact with and predate on bait and catch in the tuna longline fishery. Absence sufficient documentary evidence, NMFS determined, based on the predation rate, the likelihood of marine mammal mortality and serious injury is more than remote. Also, NMFS is unaware of best practice guidance or mitigation measures to reduce marine mammal interactions or bycatch in tuna longline fisheries. NMFS welcomes further analyses of the bycatch rates associated with these fisheries, and an analysis of the bycatch compared to the bycatch limits for the species interacting with these fisheries. Moreover, NMFS looks forward to working with Australia to achieve a bycatch risk assessment of marine mammal interactions in tuna longline fisheries in the Indian Ocean and Western and Central Pacific Ocean.

The Bahamas

Changes made to Bahamian fisheries include combining all hand collection exempt fisheries for conch, coral, and sponge into one fishery. No further changes were made.

Belgium

Based on the European Union’s information, three export fisheries were added: northern prawn beam trawl, sole otter trawl, and a northern prawn otter trawl. All fisheries operate in the southern and central North Sea and interact with harbor porpoise. Thirteen fisheries are listed as export fisheries with no information.
Belize

No fishery was reclassified, and information is lacking for several fisheries including the snapper, grouper, finfish gillnet fishery; shrimp trawl fishery, tuna longline and purse seine fisheries operating under Inter-American Tropical Tunas Commission (IATTC) and International Commission for the Conservation of Atlantic Tunas (ICCAT), and the mackerel and sardine trawl fishery.

Belize Comment 1: Belize stated that the humpback whale reported by Breakingnewsbelize.com was observed stranded for approximately two weeks in the waters off Puerto Barrios, Guatemala. The whale floated to Belizean waters where it eventually died. At its death, the whale was not entangled in gillnet; consequently, Belize asserts the cause of death was likely starvation, exhaustion or sickness. Belize maintains there are no records of humpback whales entangled in shark gillnets and the presence of large cetaceans in Belizean water is uncommon because Belizean waters are not a migratory, feeding or breeding area due to the shallow Belize Barrier Reef System. Belize further notes that over the last decade, no dolphin or West Indian manatee has reportedly died as a result of interactions with the shark gillnet fishery.

Response: NMFS notes Belize’s comments; however, gillnets have, across a global ranges of fisheries, documented interactions with marine mammals, including whales, dolphins, and manatees. NMFS also has data indicating a co-occurrence of marine mammals and gillnet fisheries within Belize’s Exclusive Economic Zone (EEZ). Without more substantial documentation about the Belize shark gillnet fishery, including logbook or observer data summaries, NMFS cannot reclassify this fishery as exempt.
Belize Comment 2: Belize suggests that the shark longline fishery occurs in waters outside West Indian manatee habitat, so interactions with the fishery are likely negligible. Also, Belize stated there are no documented cases of dolphin bycatch in shark longlines in Belize. Therefore, Belize recommended the removal of dolphins and West Indian manatee from the list of species interacting with the shark longline fishery.

Response: NMFS notes Belize’s comments. Absent more substantial documentation about the Belize shark longline fishery and marine mammal habitat utilization, NMFS cannot reclassify this fishery as exempt or change the list of marine mammals interacting with this fishery.

Canada

Based on analysis of Canada’s information, the following fisheries were reclassified as exempt fisheries as these fisheries operate in inland waters and have no documented marine mammal interactions or co-occurrence: eel drift gillnet fishery operating in the gulf region, shad set gillnet fisheries operating in the gulf and Maritimes region, and smelt gillnet fishery operating in the gulf region. All chinook salmon troll fisheries operating in the Pacific region were reclassified as exempt as this gear type and fishery is analogous to the Alaska, California, Oregon, and Washington salmon troll fisheries which are listed as Category III fisheries. Kelp aquaculture in New Brunswick was reclassified as exempt as there are no documented marine mammal interactions. NMFS also reclassified as exempt several beach seine, Danish seine, jig and handline fisheries because this gear type has a remote likelihood of marine mammal bycatch. However, cunner, haddock, halibut, and cod aquaculture operations in New Brunswick maintained an export classified due to pinniped interactions.
Additionally, Canada added more than 46 new export fisheries and more than 17 exempt fisheries across all species, gear types, and areas. These fisheries were not included in the original draft LOFF. No marine mammal bycatch estimates were provided for the newly added export fisheries.

Chile

Based on the information provided by Chile, where appropriate, NMFS updated the numbers of vessels participating in various fisheries, and consolidated fisheries by fishing area.

*Chile Comment 1:* Chile requested that the Atlantic, salmon, coho salmon, and rainbow trout cage aquaculture operations be reclassified as exempt. The rationale includes Chile’s estimate that the population of South American sea lions is 197,000 animals and increasing. Chile requires the use of multifilament, 10-inch mesh, nylon antipredator nets (this mesh size prevents sea lion entanglement) that envelop the entire box-type salmon cage, creating a physical barrier that prevents sea lion depredation of stocked fish. Chile noted that Supreme Decree DS320/2002: Environmental regulation for aquaculture, regulates sonic devices that may be used to deter wildlife from approaching farm sites. To further support its argument for reclassification, Chile stated that a large percentage of salmon farms are certified by international standards, including voluntary standards requiring information about how aquaculture products are produced.

*Response:* Chile provided no bycatch estimates. Without estimates of the number of sea lions either entangled or lethally removed in its aquaculture operations, NMFS cannot determine if the incidental mortality and serious injury of sea lions in aquaculture operations is remote. Chile did not provide a peer-reviewed study citation or other
empirical research to support the claim that 10-inch mesh nets never entangle pinnipeds. Also, Chile did not provide the details of regulations governing the use of sonic deterrence devices at salmon farms. Finally, NMFS does not accept third-party certifications as the basis for classifying fisheries as either exempt or export or as the sole basis for a comparability finding. To continue exporting fish or fish products to the United States, Chile must adopt regulations that reduce marine mammal incidental bycatch and prohibit intentional mortality and serious injury at aquaculture facilities or demonstrate that it has procedures to reliably certify that exports of fish and fish products to the United States are not the product of a commercial fishing operation that permits the intentional killing or serious injury of a marine mammal unless the intentional mortality or serious injury of a marine mammal is imminently necessary in self-defense or to save the life of a person in immediate danger. The voluntary standards Chile references are insufficient evidence for reclassifying this fishery as exempt as those standards permit the lethal removal of predators. Atlantic salmon, coho salmon, and rainbow trout cage aquaculture operations remain classified as an export fishery.

Chile Comment 2: Chile requested that the “Patagonian toothfish - Southern crane eel, industrial longline fishery” be separated into two fisheries and listed as exempt. The Fisheries Development Institute, main national research institution of fishing and aquaculture, has implemented onboard observer programs in these fisheries for more than five years. The reports of these scientific observation programs indicate that although there is interaction with killer whales and sperm whales, there is no mortality of these mammals in either the Patagonian toothfish, southern hake, and pink cusk eel industrial longline fishery or the Patagonian toothfish industrial longline fishery.
Response: NMFS has reviewed the observer data and agrees. The Patagonian toothfish - Southern hake - Pink cusk eel, industrial longline and Patagonian toothfish, industrial longline fisheries have been re-classified as exempt fisheries.

Chile Comment 3: Chile requested that NMFS reclassify as exempt the Patagonian toothfish, artisanal bottom longline, XI Region (South of 47° S) to XII Region fishery, and Patagonian toothfish, artisanal bottom longline, XV to XI Regions (North of 47° S) fishery because there are no recorded marine mammal interactions in these fisheries and, these fisheries use the same fishing gear, and operate in the same area, as the industrial fleet which has zero marine mammal mortality.

Response: Absent observer summary data NMFS finds no rationale to change the export classification. Also, these fisheries interact with southern sea lions as opposed to sperm and killer whales that interact with the industrial fleet.

Chile Comment 4: Chile asked why the southern king crab artisanal trap, southern king crab industrial trap and false king crab artisanal traps fisheries are classified as export. Chile requested these fisheries be reclassified as exempt because traps are unlikely to kill or injure marine mammals and, since the early 1990s, Chile has not permitted the use of marine mammals as bait but instead officially supplies fish bait for these fisheries (see Memorandum of Understanding between the U.S. National Marine Fisheries Service (NMFS) and the Chilean Servicio Nacional de Pesca (Sernapesca), signed in 1995 and extended in 2004 and in 2015 at http://www.nmfs.noaa.gov/ia/agreements/bilateral_arrangements/chilebilat.pdf).

Response: NMFS is not classifying these fisheries as export based on their historic use of marine mammals as bait. Rather, NMFS has classified these fisheries as
export fisheries because the risk of incidental mortality or serious injury in vertical buoy lines and groundlines is more than remote for small cetaceans and large whales.

Costa Rica

Based on the information Costa Rica provided NMFS added to the list of export fisheries a bonito gillnet fishery and a flatfish, sole gillnet and trawl fishery. NMFS also combined the operating areas of the Eastern Tropical Pacific and Tropical Atlantic into one area for the following fisheries: the dolphinfish longline fishery; the shark, swordfish longline fishery; the shrimp trawl fishery; and the shrimp gillnet fishery.

Costa Rica Comment: Costa Rica stated there is no marine mammal mortality in their sole, sardine, squid and shrimp trawl fisheries. Costa Rica further stated that during more than 100 inspections of shrimp trawl vessels no dolphins have been found. Likewise, Costa Rica stated that no dolphins have been found in sardine purse seine nets operating in the Gulf of Nicoya, near Puntarenas.

Response: Absent detailed information about Costa Rica’s inspection program, observer program or logbook requirements, NMFS did not have any basis to change the classification of these fisheries. NMFS urges Costa Rica to provide additional details on the percentage of the fleet that is either observed or inspected, total average annual estimates of mortality and serious injury of marine mammals over the last five years for each fleet with observer, inspection, or logbook requirements, and whether such estimates are extrapolated to the entire fleet or are only for observed vessels or those reporting. Using such information, NMFS can re-evaluate these fisheries.

Cyprus
Based on the information Cyprus provided through the European Union, NMFS added an Atlantic Bluefin tuna purse seine fishery operating in the Eastern Mediterranean Sea, Levant area (FAO division 37.3.2) to the list of export fisheries for Cyprus.

Denmark

Based on the information Denmark provided through the European Union, NMFS updated the numbers of vessels participating in various fisheries, and consolidated fisheries by fishing area for fisheries for which there is no information.

In analyzing Denmark’s export data, NMFS removed the rock lobster fishery from the “export fisheries with no information” category as this product was only imported once in the past 17 years, in 2015, and in very small quantities. The predominant lobster export from Denmark to the United States is Norwegian lobster. NMFS also removed the cuttlefish fishery as this product was imported only once in the past 17 years, in 2016, and in very small quantities. The cuttlefish was imported as “preserved” indicating this is likely a re-exported product.

Also under “export fisheries with no information” Denmark provided fishery information for their Marine Stewardship Council (MSC) certified fisheries but, upon further analysis, NMFS removed the following fisheries from the LOFF because Denmark does not export these products to the United States; whiting and blue whiting, cusk eel, lingcod, smelt, monkfish, skates, capelin, pollock, hake, oyster, and clams.

NMFS changed the mussel dredge fishery from “export fishery with no information” to an exempt fishery as this coastal gear type is unlikely to interact with marine mammal stocks.

Estonia
Based on the information Estonia provided through the European Union, NMFS updated the numbers of vessels participating in various fisheries, and the area of operation of fishing vessels. NMFS also added an exempt fishery for cod and other species operating in the Northeast Atlantic and added two export fisheries, one for perch, herring and pike-perch, and one for herring and sprat, operating in the International Council for the Exploration of the Sea (ICES) Area IIId of the Northeast Atlantic.

Additionally, NMFS removed from the LOFF the fisheries for Greenland halibut as the United States has not imported Greenland halibut from Estonia in the past 17 years.

Falkland Islands

*Falkland Islands Comment 1*: The Falkland Islands noted it concurs with the classification of its fisheries as exempt. The Falkland Islands further noted that with respect to “Marine Mammal Bycatch Estimates” the entry in the LOFF is 'None Documented.' In its original submission, the Falkland Islands referenced its observer program, which includes significant coverage of its fisheries on the LOFF. The observer program records the presence of marine mammals and any interactions. No harmful interactions or incidental mortality or serious injury have been recorded during the last five years.

*Response*: “None Documented” is the correct reference based on the information the Falkland Islands provided. “None documented” indicates that through observer programs or logbooks neither the nation nor additional reference material have documented interactions with marine mammals.

Faroe Islands
Faroe Islands Comment 1: The Faroe Islands noted that in the draft LOFF only the Faroese scallop fishery is categorized as exempt while all other fisheries, including aquaculture, are categorized as export fisheries. The Faroe Islands asserts all its fisheries should be categorized as exempt because there are no interactions with or bycatch of marine mammals in their fisheries. Specifically, there are no marine mammal interactions or bycatch in the flatfish, sole, plaice, halibut trawl fishery, groundfish, cod, haddock, pollock trawl and longline fisheries, herring mid-water trawl fishery, and smelt trawl fishery. Further, according to logbooks, the mackerel mid-water trawl fishery catches zero to two pilot whales annually.

Response: NMFS did not reclassify these fisheries. The Faroe Islands’ rationale for reclassifying its fisheries is that there is no reported marine mammal interactions or bycatch in the logbooks for Faroese fisheries. NMFS understands that all Faroese fishing vessels must maintain a log of their fishing activities for each set or haul, and that this catch logbook is sent to the Fisheries Inspection. NMFS understands that fishing vessels are also instructed to report interference or bycatch of marine mammals in a special column (‘viðmerkingar’, meaning remarks) in the catch logbook. Evidence suggest that bycatch may not be properly and consistently recorded or analyzed without a specific entry. By relegating marine mammal bycatch data recording to remarks, fishermen may overlook recording their marine mammal bycatch. Additionally, NMFS is concerned that data found only in the remarks may not be consistently entered into a database. While the Faroe Islands describes that pilot whale bycatch by the 50 vessels operating in the mackerel mid-water trawl fishery is “rare,” this cannot be substantiated without additional information on whether the reported bycatch of 2 animals annually is
unextrapolated vessel reports or an extrapolated bycatch estimate for the entire fleet. North Atlantic Marine Mammal Commission (NAMMCO)(2016) lists fisheries in the Faroe Islands with marine mammal bycatch including pelagic pair trawling for mackerel, blue whiting and herring trawls; purse-seines; and shallow-water gillnets set for herring. According to NAMMCO (2016) the reliability of the reported bycatch data has never been assessed and bycatch data are missing for all fisheries. NMFS suggests that the Faroe Islands provide additional information about its logbook system, historic marine mammal bycatch estimates for each fishery, detailed bycatch estimates (including reported vs extrapolated estimates) for the mackerel mid-water trawl fishery, and further detail about the reliability of its bycatch data and the co-occurrence of marine mammals in all its fisheries.

Faroe Islands Comment 2: The Faroe Islands recommended that all trap fisheries be classified exempt. The Faroe Islands claim that the lobster and snow crab trap fisheries have no reported marine mammal bycatch in logbooks. The lobster trap fishery’s trap opening size is 25 centimeters, which prevents marine mammals from entering traps. The snow crab trap fishery is conducted in water depths of less than 270 meters outside 12 nautical miles in the Svalbard zone.

Response: NMFS did not reclassify these fisheries. Bycatch of marine mammals does not occur from animals entering the trap but from animals becoming entangled in buoylines and groundlines. Snow crab fisheries in several nations (e.g., Canada) have documented bycatch of large whales in snow crab traps and lines. On this basis, NMFS retained the classification of these fisheries as export.
Faroe Islands Comment 3: The Faroe Islands stated that Faroese authorities – ministries together with natural research institutes – are establishing legislation and management plans to secure a sustainable development of the grey seal stock, the only coastal seal species in the Faroe Islands. Aquaculture companies have taken measures to reduce the removals of grey seals to accomplish international accreditation for the farms, and in the past three to four years the number of grey seals removed from aquaculture farms was significantly reduced. The Ministry of Foreign Affairs and Trade will inform the United States once its seal management laws come into force.

Response: According to the MMPA import rule, to continue exporting fish and fish products to the United States, the Faroe Islands must adopt regulations to reduce incidental marine mammal bycatch and prohibit intentional mortality and serious injury at aquaculture facilities or demonstrate that it has procedures to reliably certify that exports of fish and fish products to the United States are not the product of a commercial fishing operation that permits the intentional killing or serious injury of a marine mammal unless the intentional mortality or serious injury of a marine mammal is imminently necessary in self-defense or to save the life of a person in immediate danger. NMFS looks forward to receiving information on such regulations related to seal management at Faroese aquaculture operations; however, since the Faroe Islands currently permits the lethal removal of seals, Atlantic salmon aquaculture operations will remain an export fishery.

France

Based on the information France provided through the European Union, NMFS removed swordfish from the purse seine tuna fishery in Indian Ocean Tuna Commission
(IOTC) convention area and added a separate swordfish longline fishery in IOTC. NMFS added as an “export fishery with no information” an Acoupa Rouge (e.g., croaker) 
(Cynoscion acoupa) fishery operating in the Guyana EEZ, because information about this fishery lacked detail including the absence of marine mammal bycatch information. Although France provided fisheries information indicating marine mammal interactions as “zero interactions reported” for select fisheries, France failed to provide summaries of vessel logbooks or observer reports to substantiate this estimate. NMFS therefore did not reclassify these fisheries and recorded the information as “no information.”

Germany

Based on the information Germany provided through the European Union, NMFS combined multispecies fisheries based on gear type and area of operation. NMFS updated gear types for fisheries to correctly classify Germany’s fisheries.

Greece

Based on the information Greece provided through the European Union, NMFS combined multispecies fisheries based on gear type and area of operation. Under “export fisheries with no information,” NMFS removed crab from the LOFF as this product is inconsistently exported to the United States and is likely a re-export from Greece. The mullet indicated in the U.S. trade database is exclusively roe so NMFS combined this product with caviar.

Greenland

Based on Greenland’s information, NMFS deleted the following export fisheries: Atlantic salmon gillnet, Atlantic salmon open boat, and redfish trawl fisheries. The operational areas for the halibut trawl, longline, and gillnet fisheries have been combined
into one fishery as have the cod poundnet, longline, and gillnet fishery (see response to Greenland comment 1). The shrimp trawl fishery was reclassified from export to exempt (see response to Greenland comment 1).

Greenland Comment 1: Greenland maintains that only 8 fisheries produce fish and fish products for export to the United States, yet the draft LOFF contains 32 Greenlandic fisheries. Greenland further maintains none of the eight fisheries should be classified as export as there are no or few encounters with marine mammals.

Response: As noted in the LOFF, NMFS developed the draft LOFF based on information provided by Greenland. Based on Greenland’s comments, it is inappropriate for NMFS to split gear types into small and separate areas of operations as doing so results in more export fisheries being designated than operate in Greenland waters. NMFS therefore combined the areas of operation for the Greenland halibut trawl, gillnet, and longline fisheries, and the cod poundnet, longline, and gillnet fisheries. Further, NMFS reclassified the shrimp trawl fishery as exempt because of the remote likelihood of incidental mortality and serious injury of marine mammals and the lack of co-occurrence of marine mammals with this fishery. NMFS did not reclassify any other fishery. NMFS recognizes that there may still be uncertainty around the registration of marine mammal bycatch in its fisheries and that data from its 2016 regulatory requirement making it compulsory for the fishermen and buyers to report all catches, including by-catches, is still being evaluated. NMFS encourages Greenland to evaluate its bycatch data under its new regulatory regime, consider placing observers on its larger trawl vessels, and revise its analysis of marine mammal bycatch in its fisheries because
such analysis may identify pot and gillnet fisheries as priority fisheries for bycatch mitigation.

Greenland Comment 2: Since 1998, Greenland, through the North Atlantic Salmon Conservation Organization, committed to ban commercial fishing and export of salmon. Greenland carries out a permitted, internal subsistence salmon fishery. Greenland maintains Atlantic salmon is not an export species and should not appear on the LOFF.

Response: NMFS agrees, and the U.S. trade database has no record of salmon imports dating back to 2000. NMFS removed these fisheries. Likewise, the U.S. trade database has no records of redfish exports to the United States, dating back to 2000. NMFS removed from the LOFF the redfish trawl fishery.

Greenland Comment 3: Greenland believed that the LOFF would only describe foreign fisheries that produce fish or fish products exported to the United States. However, Greenland’s understanding now is the LOFF includes all fisheries with the potential for export to the United States (e.g., now and in the future).

Response: Greenland’s current understanding is correct; but NMFS urges nations to err on the side of including all fisheries which may now, or in the future, export to the United States. By including all such fisheries, nations will have ample time to develop the monitoring or regulatory programs required for comparability findings for these fisheries. Delaying such action until exports begin will give these fisheries less time to comply (see 50 CFR 216.24 (h)(8)(vi)).

Guatemala

Guatemala Comment 1: Guatemala challenged the information for the snapper, grouper, shark longline fishery, stating the information in the 2011 report is dated and
there are no interactions with or capture of marine mammals in their fisheries. Guatemala also referenced its understanding that the affirmative finding process under the MMPA provides it with its current authorization to export to the United States.

Response: In the absence of evidence to substantiate the claim that its fisheries do not interact with or capture marine mammals, NMFS did not reclassify any Guatemalan fisheries. With regard to the affirmative finding, this finding is only applicable to tuna captured in the eastern tropical Pacific Ocean by purse seine vessels. Specifically, dolphin (family Delphinidae) incidental mortality and serious injury in eastern tropical Pacific yellowfin tuna purse seine fisheries are covered by section 101(a)(2)(B) and Title III of the MMPA (16 U.S.C. 1371(a)(2)(B) and 16 U.S.C. 1411–1417), implemented at 50 CFR 216.24(a)–(g). Nations must still comply with those provisions and receive an affirmative finding to export tuna to the United States. Tuna purse seine fishing vessels fishing for tuna with a carrying capacity of 400 short tons or greater that are governed by the AIDCP are not included in the LOFF and are not required to apply for and receive a comparability finding. Purse seine vessels under 400 short tons and vessels using all other gear types operating in the eastern tropical Pacific must comply with the MMPA import rule. All other fisheries operating within the nation’s EEZ or in any other ocean and exporting fish and fish products to the United States must be included in the LOFF and must apply for and receive a comparability finding.

Iceland

Based on information provided by Iceland, NMFS reclassified as exempt: multispecies finfish and shellfish dredge and fishing rod fisheries, and seaweed and sea cucumber fisheries based on their gear analogy to U.S. fisheries and the remote
likelihood of marine mammal bycatch. Iceland provided area(s) of operation for each gear type, the list of target species landed by each gear type, and the marine mammal interactions associated with each gear type. NMFS updated the LOFF to consolidate target fisheries based on gear type and area of operation and their associated marine mammal interactions accordingly.

NMFS moved salmon and trout aquaculture from “export fisheries with no information” to “export fishery” based on Iceland’s lack of a legal requirement for documenting marine mammal interactions and lack of provisions outlawing intentional mortality or injury to marine mammals that interact with aquaculture facilities. NMFS also removed from the list of export fisheries with no information, the “other gear types” fishery as Iceland accounted for additional fisheries, specifically different types of seines and specific species gillnet fisheries. NMFS moved the Arctic char aquaculture fishery to the list of fisheries to which the “rule does not apply” since this fish is solely produced by inland aquaculture farms.

Upon further analysis of U.S. trade data, NMFS removed the rock lobster fishery as this product was only exported to the United States once in the preceding seven years in low quantities and is likely a reporting error as the United States typically imports only Norwegian and Homarus spp. lobster.

_Iceland Comment 1:_ Iceland utilizes an individual catch share quota system. Individual landings of species can be traced back to the gear type that caught that species but a single gear type will target and catch many different commercial species, all of which are landed and sold. Because of this system, Iceland stated it is difficult to reduce a single species to a single gear type as all gear types are multispecies fisheries. Iceland
further noted that its Marine and Freshwater Institute assesses bycatches of marine mammals in Icelandic fisheries by fishing gear, a report of which has been provided to NAMMCO.

*Response:* NMFS acknowledges that Iceland’s multispecies fisheries do not easily fit the “target species” column of the LOFF. In consultation with Iceland, NMFS updated the target species for each gear type to indicate the multispecies nature of these finfish fisheries.

*Iceland Comment 2:* Iceland provided number of vessels associated with landings of species by gear type but noted that the sum total of the vessels in the list is much higher than the total number of vessels in the Icelandic fishing fleet as some vessels change gear during the year and some vessels fish in multiple fishing areas.

*Response:* NMFS notes that Iceland’s total fishing fleet is less than 1,700 vessels and that a single vessel can fish multiple gear types in multiple areas during the course of the year. As such, NMFS has listed “vessel numbers” for Iceland’s fisheries as “not applicable” noting this frequency of gear change, with the exception of one registered vessel fishing for bluefin tuna in Iceland’s EEZ and the ICCAT Convention Area and one mussel aquaculture farm.

India

*India Comment 1:* India collected and analyzed records of marine mammal entanglement in fishing gears from 1950 to 2015. Gillnets are responsible for 98.8
percent of marine mammal mortalities. Occasional reports of marine mammal bycatch in trawl, purse seine, shore seine and longline also exist. India provided marine mammal bycatch estimates by state and gear type and requested that most of their export fisheries be reclassified as exempt given the low rate of interaction and bycatch.

Response: NMFS appreciates India’s submission; however, NMFS could not reclassify any of India’s export fisheries because: (1) much of the data dates to the 1970s and 1980s; (2) it is unclear whether the estimates are for one year or the entire period listed in India’s submission; and (3) it is unclear whether the numbers provided in India’s table are unextrapolated counts from vessels or observer reports or extrapolated bycatch estimates for the entire fishery. Without such clarifications, NMFS cannot evaluate whether the likelihood of marine mammal bycatch in these fisheries is remote.

Indonesia

Indonesia Comment 1: Indonesia stated that shark is not a target species exported to the United States; therefore, Indonesia suggested removing shark from the LOFF. Indonesia also noted that swordfish is not a target species, but a bycatch species during tuna fishing.

Response: Since 2000, Indonesia has consistently exported shark, shark fins, and swordfish to the United States. Whether a species is targeted or bycaught is inconsequential; what matters is whether it is exported to the United States. Indonesia should identify the fisheries in which these species are taken to ensure that those fisheries are accurately identified and described in the LOFF. All exports to the United States must be included in the LOFF. NMFS made no change to these fisheries.
Indonesia Comment 2: Indonesia noted that all cetacean species are included in the Convention on International Trade of Endangered Species of Flora and Fauna (CITES), which prevents the trade of such species or any of their parts. Indonesia has a National Plan for Marine Mammal Protection and has designated two marine mammal protection areas (Lovina and Savu Sea). Additional national laws and regulations govern the tuna fishing industry and marine mammal protection. Based on this information, Indonesia requested that NMFS reclassify its export fisheries as exempt fisheries.

Response: Indonesia’s information does not provide evidence that the frequency of marine mammal bycatch in its fisheries currently listed as export is less than remote. In fact, available reports indicate that marine mammal bycatch may exist in both tuna purse seine and longline fisheries. Additionally, there are still seven fisheries classified as export fisheries because Indonesia has not provided the information necessary to classify these fisheries. NMFS recommends that Indonesia develop and implement a consistent marine mammal bycatch monitoring scheme, especially for its tuna fisheries, and fully implement the conservation and management measures of the IOTC and the Western and Central Pacific Fisheries Commission (WCPFC), which prohibit the intentional encirclement of cetaceans with purse seine nets.

Ireland

Upon further analysis of U.S. trade data, NMFS combined the fisheries for hake and lobster into the multispecies gillnet fishery for pollock, lobster and hake. NMFS removed the fisheries for tuna and turbot as Ireland has not exported either of these species to the United States during the preceding seven years. Under the category of export fisheries with no information, NMFS removed rock lobster as this species is
included in the export multispecies fishery for pollock, lobster, and hake. Also under this category, NMFS removed salmon as it is included in the driftnet fishery operating in Ireland’s EEZ. NMFS also removed the gillnet fishery operating in the northeast Atlantic with no specified target fishery as this fishery and its associated bycatch are included in the export fisheries for crawfish and lobster.

**Italy**

Based on Italy’s information submitted by the European Union, NMFS updated vessel numbers; changed the gear type for the anchovy, pilchard, and sardine fishery from “seine” to “purse seine”; and removed the swordfish driftnet fishery from the LOFF based on national legislation and EU regulation banning the use of largescale driftnets.

NMFS also reclassified the clam, mussel, mollusk dredge fishery from export to exempt based on analogous gear from other dredge fisheries without marine mammal bycatch and the coastal operational area of the fishery. NMFS noted in the “detailed information” that the swordfish longline fishery appears to be operating in accordance with the National Observer Program under ICCAT.

Italy noted that most of its seabream and seabass products are from aquaculture; however, Italy did not provide the area of operation for these aquaculture facilities or details on how these species are cultured. Italy previously declared a fishery for seabass and sea bream with a gear type of “small-scale fisheries.” This fishery is lacking information on the specific gear types involved in fishing these species.

*Italy comment 1:* Italy noted that their prior submission to the draft LOFF provided information indicating marine mammal interactions as “zero” for select fisheries and asked why this information was not reflected in the LOFF.
Response: Italy did not provide any information such as vessel logbooks, or observer reports to substantiate the bycatch estimates of zero; therefore, no changes were made to the fishery classifications.

Jamaica

Jamaica Comment 1: The Jamaican wild marine penaeid shrimp fishery is a small-scale fishery for local consumption. In the past, exports of marine shrimp were produced by inland aquaculture facilities. Recent and current marine shrimp exports are all re-exports. Future marine shrimp production will be through aquaculture. All current ornamental fish production is produced through freshwater culture. Current Jamaican policies discourage wild caught marine ornamental fish fisheries. Notwithstanding, sustainable wild caught marine ornamental fish fisheries may be considered in the future. Response: Based on the information provided, NMFS removed the marine Penaeid shrimp fishery and the ornamental fish fishery from the LOFF.

Jamaica Comment 2: Jamaica is actively pursuing the development of the following fisheries: (a) artisanal and semi-industrial pelagic longline fisheries; (b) marine crab trap fishery; and (c) freshwater aquaculture of Pangasius spp., Carps, and Collasoma spp. Jamaica is developing a comprehensive management plan for its pelagic fishery. Jamaica envisions these plans and their related legislation will include provisions to ensure minimal interaction with or minimal mortality or injury of marine mammals.

Response: NMFS will revise the LOFF in 2020. At that time, NMFS encourages Jamaica to provide detailed information about these fisheries, including all marine mammal bycatch estimates. NMFS encourages Jamaica to include provisions to monitor
and evaluate the marine mammal bycatch in these fisheries. Additionally, if Jamaica resumes its ornamental fish fisheries, it must provide information so NMFS can classify the fishery and, if determined to be either an exempt or export fishery, apply for a comparability finding.

Japan

Based on Japan’s revised information, NMFS updated target species, gear type, vessel number, area of operation, marine mammal interactions, marine mammal bycatch estimates, and comments for all Japan’s commercial fisheries. NMFS compared bycatch and interaction estimates provided by Japan with IWC reported interactions where possible to reconcile differences. As described in the Federal Register Notice publication of the draft LOFF (82 FR 39762; August 22, 2017), NMFS designated all gillnet, longline, non-tuna purse seine, fish pots and trap fisheries not operating in the Caribbean region, and trawl fisheries as export fisheries. NMFS retained the export classification for these fisheries in Japan's LOFF with the rationale of A/G (analogous gear) and N/I (no information). In order to reclassify these fisheries as exempt, NMFS looks to Japan to provide sufficient documentation to justify re-classification. Sufficient documentation includes: summary information from logbooks or other fisher reports, observer records or programs, recent strandings data, and details on the species and distribution of marine mammals in the area where fishing operations are occurring.

Latvia

Based on Latvia’s information provided by the European Union, NMFS updated: the target species in the multispecies trapnet fisheries; fishing season for all fisheries; and
marine mammal presence and interactions for fisheries to indicate harbor porpoise presence but no recorded interactions.

Lithuania

NMFS updated fishing season for all fisheries based on Lithuania’s information provided by the European Union.

Madagascar

Based on the information provided by Madagascar, NMFS updated the numbers of vessels participating in the export tuna and shrimp fisheries. NMFS also added company names for seaweed and shrimp aquaculture operations.

In analyzing the U.S. trade data for Madagascar, NMFS removed the fisheries for molluscs from “export fisheries with no information” as this product was imported only three times in the past 17 years, in 2001, 2002, and 2004, and in small quantities. NMFS also removed the fisheries for marine fish and grouper, as these products were imported only once in the past 17 years, in 2016, and again in small quantities.

Malta

Upon further analysis of U.S. trade data, NMFS removed the swordfish fishery as Malta has not exported this species to the United States at any point in the preceding seven years. NMFS updated fishing seasons for all fisheries.

Mauritius

Based on the information Mauritius provided, NMFS added a pelagic swordfish, tuna (albacore, yellowfin, bigeye, billfishes, shortfin mako shark) vertical longline fishery. NMFS removed the swordfish, tuna (albacore, yellowfin, bigeye, billfishes,
shortfin mako and shark) mid-water trawl fishery because, according to Mauritius, these species are fished using surface longline and purse seines rather than trawl gear.

**Mauritius Comment 1:** Mauritius clarified that for most pelagic species (swordfish, tuna albacore, yellowfin, bigeye, billfishes and some shark species), the gears used are vertical longline (artisanal fishermen), surface longline (semi-industrial longliners) and purse seines. Mauritius claims in these fisheries there are chance encounters with marine mammals. Mauritius further noted at present there are approximately 350 artisanal fishers that fish for pelagic species on Fish Aggregating Devices (FADs) placed around the island of Mauritius. The semi-industrial longline fleet consists of eight vessels targeting pelagic species.

**Response:** NMFS notes Mauritius’s comments but, without observer or logbook information substantiating its claim that marine mammal encounters are “chance” in longline and purse seine gears, NMFS cannot reclassify these fisheries.

**Mexico**

Based on information provided by Mexico, NMFS updated gear type, vessel numbers, areas of operation, marine mammal interactions, and comments for select fisheries. NMFS reclassified from export to exempt the red snapper and grouper longline fisheries operating in the Gulf of Mexico because they are analogous to the U.S. Category III Southeastern U.S. Atlantic, Gulf of Mexico, and Caribbean snapper-grouper and other reef fish bottom longline/hook-and-line fisheries. Similarly, NMFS reclassified, from export to exempt, the shark longline fishery operating in the Gulf of Mexico because it is analogous to the U.S. Category III Southeastern U.S. Atlantic, Gulf of Mexico shark bottom longline/hook-and-line fishery. NMFS also reclassified the lobster trap fishery
operating in the Gulf of Mexico because it is analogous to the U.S. Category III Caribbean mixed species and lobster trap/pot fisheries and has no documented marine mammal interactions.

Based on Mexico’s submission, NMFS added to export fisheries, the trap, longline, and gillnet fisheries for sole, white corvina, and verdillo operating on the west coast of the Baja California Peninsula. NMFS also removed the red snapper gillnet fishery as there is no authorized gillnet fishing for snapper in the Gulf of Mexico. NMFS added herring to the sardine/mackerel purse seine and gillnet fisheries operating on the west coast of the Baja California Peninsula. Finally, NMFS changed the Gulf of California lobster fishery gear type from tangle net to trap.

Based on Mexico’s information, NMFS added a cobia hand line fishery and a conch diving fishery to exempt fisheries.

Based on Mexico’s submission and further analysis of U.S. trade data, in the category “export fisheries with no information,” NMFS removed the fishery for lobster (Homarus spp.) as this was likely a reporting error. Lobsters received from Mexico are rock/spiny lobster and would likely not be North Atlantic lobster species. NMFS also removed the silverside (pike, blacknose, longjaw, bigmouth, shortfin) fishery since the United States has not imported products from this fishery for over seven years. NMFS removed the eel fishery because this is a freshwater species that does not occur in marine mammal habitat and has no marine mammal interactions so the MMPA import rule does not apply.

Based on Mexico’s submission and NMFS’s further review, NMFS removed the Gulf weakfish/corvina trawl fishery because there is no authorized trawl fishery in the
Upper Gulf of California. NMFS notes, however, if Mexico develops a finfish trawl fishery in the Upper Gulf of California, Mexico must provide the information necessary to classify the fishery and, if an export fishery, apply for a comparability finding.

*Mexico Comment 1:* Mexico maintains there are no longline fishing permits granted for tunas (yellowfin, bluefin, skipjack, others) in the IATTC Convention Area. Mexico further notes that pursuant to the National Fisheries Charter 2012 tuna catches are not allowed to be caught using gillnets.

*Response:* The IATTC vessel register lists 159 longline vessels and 1 gillnet vessel under the Mexican flag. While Mexico may not be currently longline or gillnet fishing for tuna in the IATTC Convention Area, NMFS retained these fisheries as export given the number of vessels registered in IATTC.

*Mexico Comment 2:* Mexico claims its lobster, octopus, and squid trap/pot fisheries are highly selective fishing gear types and as such should be classified as exempt.

*Response:* While NMFS reclassified as exempt the lobster trap fishery in the Gulf of Mexico because it is analogous to the U.S. Category III Caribbean mixed species and lobster trap/pot fisheries, trap/pot fisheries for lobster, octopus, or squid operating in all other areas (other than the Gulf of Mexico), have no analogous U.S. fishery nor can they demonstrate no interaction. In the lower Gulf of California and west coast of Mexico, marine mammals, such as large whales using and migrating through the area, can become entangled in trap/pot buoy (vertical) lines and groundlines (lines between traps). Mexico provided no evidence that the likelihood of marine mammal bycatch in octopus, lobster
traps/pots is remote; therefore, NMFS retained the export classification for these fisheries.

*Mexico Comment 3:* Mexico noted that there are no gillnet fisheries for shrimp and finfish in the upper Gulf of California because of its permanent ban on gillnet fishing. Further, Mexico maintains that the gillnets used as “encircling nets” in the corvina fishery in the upper Gulf of California are selective and have no evidence of vaquita interaction.

*Response:* NMFS applauds Mexico’s announcement of the gillnet ban in the upper Gulf of California. Although this ban affects several historically gillnet-fished species in the area (including gulf weakfish/corvina, sardines, mackerel, herring, shark, shrimp and other finfish), NMFS retained these fisheries as export because of evidence of continued illegal fishing and vaquita mortality. NMFS believes it is important that Mexico report on the implementation and enforcement of its gillnet ban. Further, NMFS still maintains that the gillnet exemptions for corvina and sierra are unwarranted. Scientific data run contrary to Mexico’s assertion that corvina and sierra fisheries do not interact with vaquita, specifically the sierra fishery has observed vaquita bycatch (D’agrosa et. al., 2000). NMFS has retained the export classification for the corvina and sierra gillnet fisheries. Finally, Mexico must provide information on any new gear types that it authorizes to fish in the upper Gulf of California for shrimp and finfish so these fisheries can be classified and receive a comparability finding.

*Mexico Comment 4:* Mexico included AIDCP tuna vessels in their submission for the LOFF.
Response: Mexico is a party to the AIDCP. NMFS refers Mexico to the above section titled “The Intersection of the LOFF and Other Statutes Certifying Bycatch,” noting that AIDCP tunas under this category are exempted from this rule.

Morocco

Based on Morocco’s information, NMFS updated gear type, vessel numbers, areas of operation, and comments for select fisheries. NMFS also combined the sardine, anchovy, and mackerel fisheries based on gear type, to indicate a trawl fishery and a purse seine fishery. NMFS also separated tuna and swordfish fisheries to more accurately characterize gear type, area of operation, and vessel numbers. Whereas previously NMFS had combined tuna and swordfish into the same fishery under each gear type, Morocco provided additional detail meriting splitting into hook and line, trap, and purse seine fisheries for tuna, and hook and line and longline fisheries for swordfish. NMFS removed the octopus pot fishery because this gear type is not used to catch octopus in Morocco. Finally, NMFS added hand collection and diving seaweed fisheries to exempt fisheries.

Morocco Comment 1: Morocco submitted information on marine mammal stranding monitoring efforts; two projects to assess interactions between cetaceans and fishing activities in the Mediterranean and Strait of Gibraltar; and its participation in the Agreement on the Conservation of Cetaceans in the Black Sea, Mediterranean Sea and contiguous Atlantic area (ACCOBAMS) Survey Initiative.

Response: NMFS applauds these efforts and looks forward to the findings; however, Morocco did not offer the detail necessary for NMFS to evaluate the frequency of marine mammal bycatch to reclassify Morocco’s fisheries. NMFS encourages
Morocco to develop a marine mammal bycatch monitoring program so, in the future, Morocco may provide detailed marine mammal bycatch estimates for its fisheries.

*Morocco Comment 2:* Morocco noted that fishermen sever the fins of incidentally caught dolphins to facilitate removal of the marine mammal from the net.

*Response:* NMFS does not condone this practice; severing the fins of incidentally caught dolphins to facilitate their removal from the net would be considered a serious injury and would be counted against the bycatch limit for that species. This practice could also be considered an intentional injury of the dolphin and could possibly jeopardize the issuance of a comparability finding for that fishery. NMFS urges Morocco to develop safe handling and release guidelines or requirements that prohibit the intentional severing of fins to release a marine mammal from a net entanglement.

**Netherlands**

Based on the Netherlands’ information submitted by the European Union, NMFS updated fisheries to indicate where there is marine mammal co-occurrence, and the fishing season for all fisheries. NMFS also removed the sinking gillnet fishery with no specific target species because this is a recreational fishery that does not export product to the United States (see [http://www.ices.dk/sites/pub/Publication%20Reports/Advice/2016/2016/Protected_species_bycatch.pdf](http://www.ices.dk/sites/pub/Publication%20Reports/Advice/2016/2016/Protected_species_bycatch.pdf))

**New Zealand**

Based on the information New Zealand provided, NMFS removed the hake (hoki, ling, white warehou) bottom longline fishery from the LOFF as it does not exist; hake is taken almost entirely by trawl. NMFS also removed shark fins (all gear types) from the
LOFF as fins are a product of sharks captured in the spotted dogfish (rig), mixed inshore trawl fisheries, and surface longline fisheries for tuna, not a separate target fishery.

*New Zealand Comment 1:* New Zealand is currently finalizing models that use a PBR-like approach to quantify the extent of fisheries interactions with marine mammals, and the subsequent impacts to marine mammal populations. New Zealand anticipates finalizing this work within the next two years and will use this information to support its application for a comparability finding. Following completion of this work, New Zealand plans to apply for a comparability finding in 2019 or 2020.

*Response:* While the regulations do not require nations to apply for a comparability finding until March 2021, NMFS will accept and evaluate comparability finding applications submitted prior to the application deadline.

*New Zealand Comment 2:* New Zealand asked if it would be acceptable under the MMPA Import Rule to aggregate all New Zealand fisheries into a single assessment, including those not currently exporting to the United States. The proposed aggregated approach would estimate total marine mammal interactions across all fisheries within New Zealand’s EEZ (species/gear types/areas) and compare those to an estimate of fishing-related mortalities that each marine mammal population can sustain without significantly impacting the population. New Zealand believes this approach, instead of considering each fishery in isolation, would account for all fishing-related mortalities on a given marine mammal population. This approach would also reduce the need for future comparability finding applications if it is demonstrated that bycatch is below sustainable levels for all fisheries. New Zealand noted that if it cannot aggregate all New Zealand fisheries into one assessment, it will need to reconsider the current fishery groupings, and
its modelling approach, to ensure that model outputs and the fisheries listed are consistent and accurately reflect a 'fishery' from an operational perspective.

Response: The MMPA Import Rule requires a nation to submit an application for each export fishery. That said, the MMPA Import Rule also requires that for those fisheries, a nation undertake a comparison of the incidental mortality and serious injury of each marine mammal stock or stocks that interact with the export fishery in relation to the bycatch limit for each stock; and comparison of the cumulative incidental mortality and serious injury of each marine mammal stock or stocks that interact with the export fishery and any other export fisheries of the harvesting nation showing that these export fisheries: (i) do not exceed the bycatch limit for that stock or stocks; or (ii) exceed the bycatch limit for that stock or stocks, but the portion of incidental marine mammal mortality or serious injury for which the export fishery is responsible is at a level that, if the other export fisheries interacting with the same marine mammal stock or stocks were at the same level, would not result in cumulative incidental mortality and serious injury in excess of the bycatch limit for that stock or stocks (see 50 CFR 216.24 (h)(6)(iii)(C)(6)). While this may not be the same aggregation New Zealand envisions, it does require that all marine mammal mortality and serious injury across all gear types be evaluated against the bycatch limit for that marine mammal population. The impact of all fisheries and each fishery interacting with a marine mammal population is evaluated against the bycatch limit for that marine mammal stock, allowing for the greatest flexibility and likelihood of issuing a comparability finding, especially for those fisheries with little bycatch.
**New Zealand Comment 3:** New Zealand requested information about how often the LOFF will be reviewed or updated.

*Response:* In 2020, the year prior to the expiration of the exemption period, NMFS will re-evaluate foreign commercial fishing operations and publish a notice of availability in the *Federal Register* of the draft LOFF for public comment, followed by notice of availability of the final revised LOFF in the *Federal Register*. NMFS will revise the final LOFF, as appropriate, and publish a notice of availability in the *Federal Register* and update the LOFF every four years thereafter.

**Norway**

Based on the information Norway provided, NMFS reclassified the Norwegian krill fishery as exempt.

The largest population of fur seals is on the island of South Georgia, which supports about 95 percent of all Antarctic fur seals (IUCN 2008). In 1999/2000, when the last survey occurred, the total population was estimated between 4.5 and 6.2 million seals, and is believed to have increased by 6 percent –14 percent since the 1990/1991 season (IUCN 2008). In 2004, all populations of fur seals are believed to be either increasing or stable (SCAR EGS 2004). Assessments of fur seal population size in Area 48, where the krill fishery occurs, are not currently available. Mortalities of fur seals in the krill fishery have declined over time, but were sometimes substantial before the mandatory deployment of seal exclusion devices. In 2005, CCAMLR implemented rules requiring the use of seal exclusion devices by each vessel. Between 2008 and 2014, no fur seal mortalities were reported, only two were reported in 2015. Using a minimum stock size which includes a 30 percent reduction in the overall stock size from the last
available estimate, the stock is estimated at 2.94 million individuals. A recovery factor of 0.5 results in a PBR of 88,200 individuals. Based on these calculations and the bycatch mitigation requirements the krill fishery has a remote likelihood of having bycatch levels in excess of 10 percent of the PBR-level. Based on these calculations NMFS reclassified this krill fishery as an exempt fishery.

Based on information Norway submitted to ICCAT, from 2014 through 2017 there was no reported or observed bycatch of marine mammals in the tuna longline/purse seine fisheries. Therefore, NMFS reclassified the Norwegian longline and purse seine tuna fisheries as exempt.

NMFS also reclassified the demersal fish (cod, haddock, angler fish, and tuna, saithe) Danish seine fishery as exempt as this gear type has a remote likelihood of marine mammal bycatch.

Norway Comment 1: Norway requested that longline, trawl, and purse seine fisheries be reclassified as exempt. Fisheries conducted with longline, and trawl are mainly for demersal fish. Purse seine fisheries are mainly for pelagic fish, such as herring, capelin, tuna and saithe. Norway has no reported or observed marine mammal bycatch in these fisheries, in logbooks, by observers, in landing reports, or in other sources of information (detailed information about Norwegian observer programs is provided in a report to the North Atlantic Marine Mammals Commission (NAMCCO), "Observed and Reported Bycatches of Marine Mammals in the Norwegian Shelf and Offshore Fisheries" (NAMMCO/15/MC/BC/7). Norway asserted that because there is no information on marine mammal bycatch in these fisheries, they have a remote likelihood of marine mammal bycatch in excess of ten percent of PBR level.
Response: Norway has only observed this fishery once in 2005 and lacks more recent observer data for these fisheries. We understand that Norway intends to resume its observer program in 2018; and NMFS looks forward to Norway submitting the revised observer data and bycatch estimates when the LOFF is revised in 2020. NMFS uses more recent bycatch estimates taken over a series of several years. Absent more recent observer information, NMFS lacks justification for reclassifying the trawl, longline, and purse seine fisheries from export to exempt fisheries.

Norway Comment 2: Norway noted that "Co-occurrence Evaluation" and an "Analogous Gear Evaluation" do not include information on biology, spatial distribution, marine mammal abundance and other factors critical to assess whether marine mammal bycatch occurs in a fishery. Norway also stated NMFS should not assume that a marine mammal caught by a trawl fishery in one geographical area will automatically be caught using the same gear in another geographical area.

Response: In the draft LOFF Federal Register notice, NMFS published the scientific basis for its co-occurrence evaluation. This evaluation is based on the best available scientific information, and absent information documenting the presence or absence of marine mammal bycatch, NMFS will use this and other available scientific information for its evaluations. Likewise, absent documented information on bycatch or co-occurrence, NMFS believes use of analogous gear is a legitimate rationale for classifying fisheries. In some instances, NMFS classifies its domestic fisheries based on analogous gear types.

Norway Comment 3: Norway noted that the definition of an "export fishery" includes fisheries having marine mammal bycatch in excess of 10 percent of PBR for that
marine mammal stock and that bycatches in such fishery must be reduced to obtain a comparability finding. Norway cannot understand the basis for this threshold. Further, Norway stated that if they accepted as a premise that fish import into the United States must be harvested in a sustainable manner for bycatch species such as marine mammals, to equate this to not exceeding the level of PBR, a ten-fold "extra insurance," seems without any scientific and biological justification.

Response: NMFS disagrees; the MMPA import rule is based on sound science and follows the same standards as the U.S. regulatory program for its fisheries. Exempt fisheries are equivalent to Category III fisheries in the U.S. regulatory program because the impact of these fisheries on marine mammals is negligible and the likelihood of bycatch is remote. Export fisheries are functionally equivalent to Category I or II fisheries under the U.S. regulatory program (see definitions at 50 CFR 229.2). Fisheries that NMFS determines have more than a remote likelihood of incidental mortality and serious injury of marine mammals, or for which there is a lack of reliable information that they have no or a remote likelihood of incidental mortality and serious injury to marine mammals, will be classified as export fisheries. Because the United States focuses its incidental mortality and serious injury assessment efforts and regulatory requirements on Category I and II fisheries (which are domestic fisheries where the likelihood of incidental mortality and serious injury is more than remote), NMFS has adopted the same approach in the MMPA import rule for export fisheries (see https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-protection-act-list-fisheries).

Oman
Oman’s fisheries remain unchanged. While Oman submitted information, the submission lacked the detail necessary for NMFS to further evaluate the frequency of marine mammal bycatch or reclassify Oman’s fisheries. NMFS notes that Oman prohibits the catch of whales or marine mammals and in 2014 and 2015 Oman conducted surveys to assess the status of its marine mammal stocks, the report of which will be provided to the International Whaling Commission. NMFS further notes Oman has initiated the adoption of regulations to limit the length of driftnets and purse seines to less than 1 kilometer (km) for artisanal boats and up to 2.5 km for artisanal/industrial coastal fleets. NMFS encourages Oman to develop a marine mammal bycatch monitoring program, so it may provide more detailed information about marine mammal bycatch estimates in its fisheries.

Pakistan

Based on Pakistan’s information, NMFS removed the coral, shells, and cuttlebone fishery because it no longer exists and there have not been exports of these products since 2009. Per Pakistan’s recommendations, NMFS modified the number of vessels and area of operation for nearly all Pakistan’s fisheries. NMFS encourages Pakistan to further develop its marine mammal bycatch monitoring program so it can provide detailed information about marine mammal bycatch in its fisheries. NMFS also urges Pakistan to diligently look for ways to mitigate marine mammal bycatch in its gillnet fisheries or consider switching to non-entangling gear given the magnitude of the bycatch and the co-occurrence of marine mammals and gillnet fisheries.

Panama
Based on Panama’s information, NMFS added three export fisheries: forage fish purse seine fishery in the Pacific Panamanian EEZ; shrimp gillnet fishery in the Pacific Panamanian EEZ; and a large pelagics surface longline fishery outside the Panamanian EEZ within the IATTC convention area (eastern central and southeast Pacific). In addition, NMFS updated target species, number of vessels, and area of operation for the vast majority of Panamanian fisheries. Panama did not provide information on the frequency of marine mammal mortality and serious injury in any of its export fisheries.

Philippines

For exempt fisheries, NMFS changed the area of operation from none provided to coastal area/EEZ. For export fisheries, NMFS changed the area of operation for several export fisheries based on the Philippines’ information. NMFS reclassified sardine, herring and squid bag net and scoop nets as exempt given the small size of the gear, its operation, and the determination that the likelihood of marine mammal bycatch is remote. Also, based on the Philippines’ information, NMFS added a tuna longline fishery operating in the EEZ and international waters under the WCPFC, IOTC, and ICCAT.

Philippines Comment 1: The Philippines challenged the export fishery classification for the blue swimming crab, noting the species is caught in coastal areas nationwide (including the Visayan Sea, Palawan, Sorsogon Bay and the Bicol area) by crab pots or traps with no reported or a remote possibility of marine mammal interactions.

Response: Marine mammals can become entangled in the buoy (vertical) line and groundlines (lines between traps) of crab traps. Because the Philippines did not provide
evidence that the likelihood of marine mammal bycatch in blue swimming crab pots is remote, NMFS could not reclassify the blue swimming crab pot fishery as exempt.

Poland

Based on Poland’s information submitted through the European Union, NMFS updated vessel number and gear type for each fishery, and marine mammal species where co-occurrence is present. NMFS split into individual target species fisheries, fisheries that NMFS had recorded as multispecies fisheries. NMFS reclassified from “export fishery with no information” to export, the Atlantic salmon trap, gillnet, and longline fisheries, and sardine pelagic trawl fisheries. Finally, upon further analysis of U.S. trade data, NMFS removed the fishery for tuna because this species has not been exported to the United States in the preceding four years and was inconsistently exported prior to 2014.

Portugal

Based on Portugal’s information submitted by the European Union, NMFS updated fishing seasons for all fisheries, and combined fisheries into multispecies fisheries based on gear type and area of operation.

NMFS also changed the bluefin tuna fixed weir/trap fishery from “export fishery with no information” to export fishery, because NMFS is uncertain whether dolphins could become entangled in the net that funnels tuna to the final area where they are harvested.

Additionally, NMFS reclassified eel, crab, cuttlefish, and lobster trap fisheries from “export fisheries with no information” to export.

Based on Portugal’s information, NMFS reclassified from “export fisheries with no information” to exempt fisheries the mussel raft and line aquaculture fishery, the hand
collection fisheries for seaweed and snails, the handline fishery for skipjack tuna, and the coastal aquaculture fishery for clams based on the highly selective nature of the gear types used to fish these products and the remote likelihood of marine mammal bycatch.

NMFS removed from the LOFF fisheries for turbot, sea bass, and sea bream and placed them on list of foreign fisheries for which the rule does not apply as these fisheries are produced by inland aquaculture. Likewise, NMFS moved salmon to the intermediary nations list as this is a re-exported, processed product.

**Seychelles**

NMFS did not reclassify any Seychelles fisheries. Based on Seychelles’ information, NMFS removed the tuna and large pelagics trawl fishery from the list of export fisheries, because this fishery is no longer permitted. NMFS added a spanner crab pot fishery to the list of export fisheries because no information was provided about this fishery.

**Seychelles Comment 1**: For the grouper, seabass, snapper set bottom fishing, ball bottom fishing and bottom drift fishing, Seychelles stated these are artisanal fisheries for mixed demersal species commonly found in association with reefs and banks with limited marine mammal interactions; therefore, these fisheries should be exempted.

**Response**: NMFS did not reclassify these fisheries because the Seychelles did not provide detailed information about the gear type, how it is fished, or any evidence from logbook or observer data indicating the entanglement rate associated with these fisheries. Without additional information, NMFS cannot evaluate whether these fisheries have a remote likelihood of marine mammal bycatch.
Seychelles Comment 2: Regarding the semi-industrial longline fishery, Seychelles stated that predation is the primary marine mammal interaction with this fishery. False killer whales depredate tuna and swordfish from the semi-industrial longliners. The Seychelles claims depredation occurs while the lines are set and to date there has been no marine mammal entanglement on semi-industrial longline gear. Seychelles stated it plans to include longliners in the scientific and compliance observer programs to monitor catches and ensure that non-targeted species (such as turtles) are avoided.

Response: NMFS did not reclassify this fishery as exempt. Marine mammal depredation on longlines poses a risk of entanglement that is more than remote. NMFS will revise the LOFF in 2020, and looks forward to receiving summaries from the Seychelles’ scientific and compliance observer program documenting the frequency of marine mammal depredation and bycatch in the semi-industrial longline fishery.

Seychelles Comment 3: Seychelles commented that the industrial longline fishery is regulated as a purse seine fishery under the IOTC, targeting mainly tuna and tuna-like species. The Seychelles asserted that this fishery should be reclassified as exempt because the gear is selective and has minimal interactions with marine mammals. The fishery is monitored and regulated through onboard inspection of catches, vessel monitoring systems, and catch logbooks. The Seychelles stated marine mammal interactions are mitigated by utilizing circle hooks, which minimize the risks of accidental catches of non-targeted species including marine mammals.

Response: NMFS did not reclassify this fishery as exempt. For NMFS to evaluate the bycatch rate in this fishery the Seychelles must provide information on marine mammal depredation and entanglement from logbooks or observer programs.
Additionally, while circle hooks may be an effective mitigation measure for sea turtles, research has not yet demonstrated that they effectively reduce marine mammal bycatch. Without more information demonstrating that the likelihood of bycatch is remote, NMFS cannot reclassify this fishery as exempt.

Slovenia

Based on Slovenia’s information submitted by the European Union, NMFS removed seaweed and albacore from the LOFF fisheries and placed them on the intermediary nations list as these are re-exported, processed products.

Upon further analysis of U.S. trade data, NMFS removed mullet, sole, hake, and whiting from the LOFF fisheries as Slovenia indicated that these are domestic fisheries for domestic consumption and are not exported to the United States. Further, the United States has not imported these products in the preceding seven years. Because Slovenia did not provide information about its mackerel fishery, which is a product exported to the United States, NMFS retained this fishery as an “export fishery with no information.”

South Korea

Based on the information South Korea provided, NMFS consolidated individual fishing provinces into a broader region designation; consolidated fisheries into appropriate multispecies fisheries; and consolidated the number of vessels operating in a region. NMFS also updated marine mammal bycatch estimates for the individual fisheries.

NMFS removed yellowtail, bass, octopus, and aquacultured mussel, and mullet from the category “export fisheries with no information,” as additional information provided by South Korea indicated that mullet and bass are captured in the multispecies
gillnet, longline fishery, and set net fisheries, octopus are caught in pots and traps as well as in the longline fisheries, and yellowtail are caught in the multispecies gillnet, set net, stationary net and purse seine fisheries. NMFS moved aquaculture mud loach from the LOFF to the category of “Rule Does Not Apply” as this is a freshwater species.

NMFS removed gear types of “illegal catch,” “strand,” and “driftnet” from fisheries listed under the category of export fisheries with no information because South Korea clarified these as instances of marine mammal stranding events and drifting carcasses for which the cause of death could not be attributed to a specific fishery. South Korea originally listed these marine mammal interactions as “strand” and “drift,” which NMFS incorrectly interpreted to mean lines and driftnets. The marine mammal deaths attributed to illegal catch were also removed because a specific fishery could not be identified as the cause of the interaction.

Finally, South Korea provided gear information for gear types “bamboo weir,” “anchovy lift net,” and “mosquito net.” NMFS reclassified these fisheries as exempt fisheries because NMFS review of the information of these practices indicated that the likelihood of marine mammal bycatch is remote.

Upon further review of U.S. trade data encompassing the last 17 years, NMFS removed haddock and hake from the category “export fisheries with no information.” Haddock have never been imported into the United States from South Korea, and hake was received intermittently and not since 2013. Additionally, NMFS removed from this category turbot that is caught in the multispecies stow net and stationary net fisheries, cusk that is caught in the multispecies trawl fishery, sardine that is caught in the
multispecies trawl and purse seine fisheries, and shad which is caught in the multispecies purse seine, set net, and gillnet fisheries. All of these fisheries were reclassified as export.

Saint Helena

Based on the information Saint Helena provided, NMFS reclassified from an “export fishery with no information” to an exempt fishery the Tristan rock lobster trap and hoop net fishery. The basis for this reclassification is this fishery has no documented marine mammal interaction and is analogous to the Category III Caribbean mixed species and lobster trap/pot fisheries.

Spain

Based on Spain’s information submitted by the European Union, NMFS updated fishing areas for species, particularly where no information had been previously provided. NMFS added longline and purse seine fisheries for tuna and swordfish in FAO Areas 21, 31, 61, and 67. Spain’s purse seine fisheries for tuna in areas 61 and 67 are operating under WCPFC conservation and management measures prohibiting the intentional encirclement of cetaceans and as such have been classified as exempt. NMFS separated into two fisheries the shark and swordfish fishery. Spain conducts a directed shark fishery with longlines within the ICCAT convention area, but NMFS does not know what additional areas shark fishing may be occurring in, or how many vessels are participating in this fishery. NMFS moved the lobster trap fishery, the anchovy and sardine purse seine fishery, and the bonito troll fishery from “export fisheries with no information” to export. NMFS classified the sea cucumber trawl fishery as export.

NMFS classified as exempt the bonito handline fishery, sea cucumber hand collection/diving fishery, the sea urchin diving fishery, and the scallop, mussel, oyster
coastal aquaculture fisheries, and the gilthead bream, bass, turbot, and bluefin tuna aquaculture because the likelihood of marine mammal bycatch is remote. NMFS removed caviar from the LOFF and added it to the category “rule does not apply” because the caviar is sourced from inland aquacultured sturgeon.

Finally, NMFS reclassified the dolphinfish fishery as “export fishery with no information” because Spain provided no details on this fishery or its marine mammal bycatch.

Suriname

Based on information provided by Suriname, NMFS updated vessel number, area of operation, marine mammal species interactions, and comments for select fisheries. Suriname listed additional export fisheries: seabob shrimp trawl; deep water shrimp trawl for orange and deep water rose shrimp; bottom trawl for weakfish, grunt, croaker, snapper, catfish, hairtail, Barracuda and other demersal fish; bottom trawl for weakfish, hairtail or cutlass, drum, croaker or butterfish, sea catfish and moonfish (prosecuted by five China flagged vessels); gillnet, longline, driftnet and fyke net fishery for catfish, Atlantic tripletail, seabob, shrimp and tarpon; setnet and pin seine for bang-bang, dagou tifi, kandratiki koepila, pani, snook and botrofisie; and a driftnet fishery for croaker, dagou tifi or bangamary. Suriname clarified gear type information on an exempt fishery, noting that 139 Venezuelan-flagged vessels prosecute snapper, grouper, dolphinfish, mackerel etc. using hook and line and handlines, while six Venezuelan-flagged vessels utilize longline gear. The longline fishery was added to the export fisheries list, and the hook and line and handline fishery remained classified as exempt. No marine mammal bycatch information was provided for these added fisheries.
Sweden

Based on Sweden’s information submitted by the European Union, NMFS updated vessel numbers and gear types. NMFS also removed salmon from the list of export fisheries with no information as it was already accounted for in the export fisheries list.

Upon further analysis of U.S. trade data, NMFS removed pollock from the LOFF as pollock has not been imported from Sweden in the preceding seven years. NMFS also removed sardine from the list of export fisheries with no information as most imports were already accounted for under the sardine and sprat fisheries. The United States imported sardines just twice in the preceding seven years, in 2014 and 2015, and in low quantities. Sardines have not been imported since 2015.

Taiwan

Based on Taiwan’s information, NMFS modified the squid driftnet fishery to a squid dipnet fishery and reclassified that fishery as exempt, as the gear type is too small to catch marine mammals. Also, the mullet, marine fish, seabass aquaculture fishery was removed from the LOFF as it is an inland pond aquaculture fishery. NMFS updated the number of vessels and area of operation for several exempt and export fisheries.

Based on Taiwan’s information, NMFS also removed from the LOFF (under “export fisheries with no information”) the fisheries listed as operating in FAO area 71 and in Indonesia because Taiwan claims these fisheries no longer operate in those areas. From this same category, NMFS added as an export fishery the cephalopod and benthic species trawl fishery.
Taiwan Comment 1: Taiwan claimed that the mackerel and bonito Taiwan seine fishery, the multi-species mackerel, snappers, crab, shark, and mullet gillnet, trammel net, and trawl fisheries, multi-species mackerel, tuna, mahi-mahi trap fishery and the Japanese and oceanic anchovy and eel larvae stow net fishery do not export to the United States.

Response: NMFS retained these fisheries as export fisheries on the LOFF as the U.S. trade data indicate either these specific species or large quantities of unspecified “marine fish” or “fish.” Until Taiwan can provide information on the species and origin of these unspecified fish imports, NMFS will continue to include these fisheries on the LOFF.

Thailand

Thailand’s fisheries are permitted and managed as multi-species pelagic or demersal fisheries. Based on Thailand’s information NMFS created gillnet, longline, pot, and trawl fisheries aggregating individual species into multi-species pelagic and demersal fishes. By separating these fisheries by individual species, NMFS was duplicating fisheries; therefore, aggregating these fisheries according to how Thailand manages and permits them, while significantly reducing the number of export fisheries, provides a realistic estimate of the actual number of export fisheries. NMFS added exempt fisheries including: whitespotted conger hand collection; whitespotted conger aquaculture; cobia aquaculture, seabass aquaculture, grouper aquaculture, demersal fish handline, and pomfret lift net fishery.

Trinidad & Tobago

Based on information provided by Trinidad & Tobago, NMFS updated target species, gear type, vessel number, area of operation, marine mammal interactions, marine
mammal bycatch estimates, and comments for select fisheries. Trinidad & Tobago listed additional fisheries. Trinidad & Tobago clarified and expanded the gear types used to prosecute tuna as dive/spear, longline, gillnet, and pelagic line. Those fisheries were added by gear type to the Trinidad & Tobago export list, with the exception of the dive/spear fishery, which was added to the exempt list due to that gear type having a remote likelihood of marine mammal mortality or serious injury.

NMFS added the following export fisheries based on information submitted by Trinidad & Tobago regarding the draft LOFF a gillnet fishery and a pelagic longline fishery for tuna, bonito, flying fish, wahoo, and dolphinfish; a banking/troll/tow/other gears fishery for croaker, salmon, weakfish, snapper, groundfish, carite, kingfish, cavali and shark; an artisanal bait seine/beach seine/Italian seine fishery for carite, kingfish, cavali, snapper, herring, weakfish, and groundfish; four artisanal multi-gear fisheries – gillnet, driftline/pelagic line, beach/land seine, and demersal longline – for tuna, bonito, flying fish, wahoo, dolphinfish, snapper and grouper.

Tunisia

Based on information provided by Tunisia, NMFS updated gear type, vessel number, and information for select fisheries. NMFS updated information for fisheries classified as “export fisheries with no information” and moved these fisheries to export. NMFS retained all fisheries on the exempt list except for lobster caught with gillnets. This fishery was moved to the export list because gillnets are known have more than remote likelihood of marine mammal bycatch.

Tunisia provided a list of seafood products known to be exported to the United States NMFS noted that several of these products were not on the draft LOFF, so those
products were added. However, Tunisia provided no additional information for those products; therefore, they were added under “export fisheries with no information.”

United Kingdom

Based on the United Kingdom’s (UK) information submitted by the European Union, NMFS updated the fishing season for each fishery. NMFS reclassified from export to exempt lift net and dredge fisheries because of their remote likelihood of marine mammal bycatch.

Upon further analysis of U.S. trade data, NMFS removed the conch fishery as the UK only exported this product to the United States once in the preceding seven years. NMFS also removed the fisheries for sprat, skate, and hake as these fisheries did not export to the United States in the preceding seven years. The UK should consider if removing these products is merited. If the UK wishes to export these products it must provide information about these fisheries and their marine mammal bycatch.

Uruguay

Uruguay noted that the fishery for black hake is a common name for toothfish fished in the CCAMLR Convention Area. As their toothfish longline fisheries are already noted, the fishery for black hake is redundant. As a result, NMFS has removed this fishery. Uruguay did not provide any other updates or information on their fisheries.

Vietnam

In response to information submitted by Vietnam, NMFS combined fisheries utilizing the same gear type targeting multiple species, including cuttlefish, grouper, mullet, snapper, demersal fisheries, and flatfish/sole. NMFS also updated vessel numbers.
NMFS reclassified to exempt the anchovy and sardine lift net fishery because it has a remote likelihood of marine mammal bycatch. NMFS moved the mud crab and shrimp aquaculture fishery from the LOFF to the “rule does not apply” list as these species are cultured at inland aquaculture facilities.

*Vietnam Comment 1:* Vietnam recommended that NMFS remove the fixed gillnet fishery for swimming crabs from the LOFF because this fishery operates in coastal areas without marine mammal bycatch. Moreover, this fishing gear has small net size (net height of 0.8 - 1.0 meters) which does not affect marine mammals.

*Response:* NMFS retained this fishery as export. Gillnet gear, even when used in coastal or nearshore areas, likely interacts with marine mammals that co-occur in these fishing areas. NMFS needs additional information supporting Vietnam’s claim that fixed gillnet gear for swimming crabs should be classified as exempt.

*Vietnam Comment 2:* Vietnam requested NMFS remove from the LOFF the fishery for octopus by demersal longline and the deep-sea pelagic fishery for orange roughy.

*Response:* Vietnam has regularly exported orange roughy and octopus to the United States in the preceding seven years. NMFS requests that Vietnam provide information on whether these products are harvested or the result of intermediary processing.

*Vietnam Comment 3:* Vietnam proposed removal of “logistic vessel” fisheries from the list of “export fisheries with no information” stating these fisheries are traditional fisheries, operating in coastal areas without marine mammal interactions.
Response: NMFS cannot reclassify these fisheries because Vietnam did not identify the species targeted by these logistic vessels nor the gear type used in this fishery.

(3) Comments Not Attributed to Specific Nations

Comment 1: Several nations recommended that NMFS consider third-party certifications of foreign fisheries as the basis to classify fisheries as exempt. Specifically, Greenland recommended NMFS consider MSC certifications in support of program efficiencies, towards establishing exempt fisheries classifications under the proposed LOFF because, amongst other criteria, the MSC certification considers marine mammal bycatch.

Response: NMFS disagrees as nothing in the MMPA authorizes NMFS to abrogate its responsibility to determine whether a fishery has bycatch in excess of U.S. standards to a third party issuing certifications for other commercial or ecological purposes. While NMFS cannot directly rely on third-party certifications to show that an export fishery is meeting the conditions of a comparability finding or for classification of a fishery, it can consider such information as part of the documentary evidence that a harvesting nation submits to receive a comparability finding. Currently, NMFS does not recognize MSC certification in its management of protected species because the criteria for obtaining MSC certification do not comport with all requirements of the MMPA. Therefore, NMFS cannot base determinations to issue comparability findings or classify fisheries solely on MSC certification.

Comment 2: One commenter claimed that in most EU waters, fisheries bycatch estimates should be considered minimum estimates of marine mammal bycatch and that reliable monitoring is lacking in most fisheries. The basis for such assertions include that:
fishermen are not required to record marine mammal bycatch in all EU nations; under EU council regulation 812/2004, only vessels greater than 15 meters are required to use onboard observers; and most cetacean bycatch is undocumented in high-bycatch fisheries such as gillnets, trammel nets, and other entangling nets used by small vessels.

The commenter further asserted that the LOFF does not fully assess the consequences of “thousands” of bycaught marine mammals and critically-endangered harbor porpoise (which number only 500 animals) in the Eastern Baltic Sea. Bycatch “in the thousands” for other populations or species sounds dramatic, but even a seemingly very low number of annual bycatches of this population occurring in ICES 27.3 subdivisions 24, 25, 26, 27, 28-2, 29 (and possibly in 28-1, 30 and 32) could drive this population to extinction. The commenter noted that even the bycatch of one harbor porpoise annually is too much and the list should reflect this. The commenter urged NMFS to take into account bycatch information on gray seals in the Baltic sea gillnet, fyke net and trap fisheries provided by Vanhatalo et al. 2014.

Response: NMFS recognizes the importance of the scale of bycatch in relation to the population size for the marine mammals affected. The first step of this process was to identify the scope and scale of fisheries exporting fish and fish product to the United States and the marine mammal stocks impacted by these fisheries. As outlined in the final rule for the MMPA Import Rule, nations will then need to address their export fisheries domestically and submit a progress report on their mitigation efforts. One way to assess fishery impact of marine mammal stocks is by calculating PBR for the stock and determining whether mortality and serious injury levels exceed PBR. As noted in the comment, the PBR could be a large number of animals, or, as noted for small, declining
stocks, a single mortality or serious injury may exceed PBR. NMFS acknowledges the scale of marine mammal interaction may differ based on location of the fishery and the marine mammal stocks with which that the fishery interacts.

Comment 3: One commenter noted the discrepancy between Germany’s reported bycatch and stranded animals with net marks. The German cod and flatfish fisheries in the Baltic (ICES 27.3.c and 27.3.d), report only 10 harbor porpoises as bycatch; whereas more than 150 dead harbor porpoises strand on German beaches annually, at least 50 percent of them with net marks.

Response: NMFS appreciates this information, but notes it is difficult to attribute a stranded harbor porpoise with visible evidence of entanglement to a specific fishery. NMFS classified as export all gillnet fisheries on the LOFF, meaning export of products from these fisheries to the United States require nations to adopt mitigation measures or a regulatory program comparable in effectiveness to U.S. standards for those fisheries.

Comment 4: One commenter noted that marine mammal bycatch occurs in the German herring set net fishery operating in the Baltic Sea ICES division IIId (TV documentary showing harbor porpoise bycatch

https://www.youtube.com/watch?v=bMkq9q7QnVg)

Response: In the LOFF, NMFS indicates for the herring set net fishery that “harbor porpoise interaction likely” and classified this fishery as export.

Comment 5: One commenter questioned the gear type and bycatch of 61 harbor porpoise in the German “fish pods” fishery operating in the Baltic Sea. The commenter suggests that NMFS review this information as pot fisheries for cod in the Baltic Sea
(fished by Sweden and Denmark) are an alternative gear preventing bycatch of marine mammals.

**Response:** The target species for “fish pods” is unknown; consequently, NMFS classified this fishery as “export fishery with no information”. NMFS is still seeking information on whether “fish pods” and fish pots are the same gear type. The estimate of 61 harbor porpoise bycaught originates in IWC reports spanning 2009-2011. Upon further review of those reports NMFS noted only 4 interactions of harbor porpoise with fish pods. NMFS has revised the bycatch estimate in the LOFF. The status report also notes 212 harbor porpoise strandings in 2010; but, as previously noted in the response to comment 3, NMFS cannot attribute these strandings to a specific fishery.

**Comment 6:** The commenter noted harbor porpoise bycatch occurs in the cod, sea trout, and salmon Polish gillnet and entangling net fisheries in the Baltic Sea. Many of these bycaught harbor porpoise are likely from the critically endangered populations, especially if bycatches occur during winter (Skora, K.E., Kuklik, I. (2003)). The commenter further noted that bottlenose dolphins are not bycaught in these fisheries because they are infrequent visitors to the Baltic Sea.

**Response:** NMFS has information indicating that harbor porpoises interact with the entangling net fishery operating in the Baltic Sea; however, the EU did not provide bycatch estimates. See response to Comment 3 for regulatory requirements.

**Comment 7:** The commenter noted that in Danish gillnet fisheries “harbor porpoise mortality in the thousands” is recorded for every target species, including gadoids, lumpfish, flatfish and herring. Some fisheries have high bycatch while others such as the herring gillnet catch fewer harbor porpoises. Vinther (1999) lists a number of
Danish North Sea fisheries with harbor porpoise bycatch. Some conclusions can also be
drawn for similar Baltic Sea fisheries although this information has not been provided in
the study. For the Kattegat and Belt Sea ICES Working Group on Bycatch of Protected
Species (WGBYC) 2015 and 2016 provide the first estimates of harbor porpoise bycatch.
However, uncertainty is quite high due to extrapolation of electronic monitoring data to
incomplete effort data.

Response: Regarding the high levels of marine mammal mortality noted for all
Danish gillnet fisheries, NMFS refers the commenter to the draft LOFF “Assumptions
Made in the Development of the LOFF,” subsection “Duplication of Marine Mammal
Interactions Based on Gear Type with No Associated Target Fishery Species” (82 FR
3976; August 22, 2017). NMFS applied available estimates of marine mammal bycatch
to similar fisheries operating within an area, especially when bycatch estimates were
unavailable and bycatch was suspected. NMFS believes this approach is in keeping with
the MMPA import rule. Without nations or other sources providing documentary
evidence to illuminate the exact gillnet fisheries responsible for high bycatch levels,
NMFS based its determination on the best available information.

Comment 8: Several commenters expressed concern about gillnets and urged
NMFS to prohibit imports from gillnet fisheries. One commenter stated that gillnets
should be banned worldwide. Turtle Island Restoration Network further noted and
strongly agreed with the classification of drift gillnets and longlines as export fisheries,
because the likelihood of mortality and serious injury caused by these fisheries is more
than remote. Several commenters agreed that gillnets consistently pose a significant risk
to marine mammals.
Response: NMFS agrees that gillnets pose a significant bycatch risk to marine mammals. The final LOFF is replete with gillnet fisheries with marine mammal bycatch. This rule requires that, to continue exporting products of these fisheries to the United States, nations with gillnet export fisheries with incidental mortality and serious injury of marine mammals, take significant steps to mitigate that mortality or serious injury, such steps could include switching to non-entangling gear (e.g., hook and line) to ensure achievement of a comparability finding.

Comment 9: The Pacific Coast Federation of Fishermen’s Associations requested that net pen tuna aquaculture and net and cage finfish aquaculture be considered export fisheries because of the use of fishmeal in these aquaculture operations. The Pacific Coast Federation of Fishermen’s Associations cited that because 60 percent of fishmeal is exported from its production country and used as feed in a different country, fishmeal should be treated as a fish product entering a separate nation. The Pacific Coast Federation of Fishermen’s Associations commented further that if fishmeal is fed to aquaculture species and then the species consuming that fishmeal are exported to the United States, NMFS should consider this a form of processing. The Pacific Coast Federation of Fishermen’s Associations stated that because the likelihood of incidental mortality and serious injury of marine mammals in foreign trawl and seine fisheries used to capture species used in fishmeal is more than remote, NMFS should classify all aquaculture operations that use or may use fish meal as export fisheries.

Response: NMFS notes that the LOFF is linked to fish that are caught or harvested in a specific fishery, not the level of processing that occurs downstream of the harvest event. That said, section 101(a)(2) of the MMPA states that the Secretary of the Treasury shall
ban the importation of commercial fish or products from fish which have been caught with commercial fishing technology which results in the incidental kill or incidental serious injury of ocean mammals in excess of United States standards. This provision makes clear the MMPA import rule regulates the bycatch of marine mammals when the animal is killed or injured during a commercial fishing operation. The law does not extend to a product that is once or twice removed from that fishery, in this case fishmeal consumed by aquaculture fish. Classifying aquaculture fisheries based on the fishery classification that is the source of fishmeal runs contrary to the MMPA.

Comment 10: The Natural Resources Defense Council (NRDC), on behalf of itself, the Center for Biological Diversity, The Humane Society of the United States, the Humane Society Legislative Fund, and Whale and Dolphin Conservation stated that New Zealand’s Danish seine fisheries likely have underreported and unmonitored interactions with marine mammals and should not be categorized as exempt without more information.

Response: NMFS notes that New Zealand’s Danish seine fishery, as is the case with Danish seine fisheries generally, has a remote likelihood of marine mammal bycatch and, as indicated above in the list of gear types and classifications, Danish seine fisheries are classified as exempt except where documentary evidence indicates marine mammal interactions are occurring. If NRDC believes marine mammal interactions are underreported in these fisheries, it must provide documentary evidence for these assertions.

Comment 11: Unless affirmative information supports an exempt classification, NRDC et al. recommended that all of Canada’s aquaculture fisheries be categorized as
export, given the well-documented instances of intentional killings at numerous aquaculture facilities.

Response: NMFS evaluates aquaculture operations on a case-by-case basis, considering the operation’s measures to reduce interactions, prohibit intentional mortality, and reduce incidental mortality and serious injury of marine mammals. NMFS classified aquaculture operations as exempt fisheries, unless there was a record of entanglement or intentional killing in such aquaculture operations. As a result, Canadian aquaculture operations for mussels, clams, scallops, oysters, marine plants, quahogs, sea urchin, sea cucumber, and kelp are classified as exempt, as are two aquaculture operations for trout and salmon, which have no documented marine mammal interactions (incidental or intentional). NMFS classified as export all other finfish aquaculture with documented marine mammal interaction and/or which permit the intentional killing or injury of marine mammals.

Comment 12: NRDC et al. recommended NMFS review the siting of aquaculture facilities and consider designating fish from facilities overlapping with whale habitat as “export” fisheries.

Response: When classifying aquaculture operations NMFS takes into consideration the co-occurrence of marine mammal and aquaculture operations.

Comment 13: NRDC et al. recommended that any fishery with any history of gillnet use, including the shrimp fishery, must be categorized as export fisheries.

Response: NMFS agrees and in the absence of documentary evidence to the contrary has designated these gillnet fisheries as export.
Comment 14: NRDC et al., recommended that NMFS designate trap pot and other fixed gear fisheries as export when they co-occur with baleen and sperm whales, including migration routes. NRDC et al., recommended that NMFS classify the Dominican Republic lobster fishery and other exporting fisheries in the Caribbean as “export” fisheries.

Response: In developing the LOFF NMFS considers co-occurrence, including fisheries operating in marine mammal breeding, feeding, and migratory areas, and will continue to evaluate foreign fisheries with respect to co-occurrence of marine mammal habitat and, where possible, include in that evaluation marine mammal migration routes.

Comment 15: The International Fund for Animal Welfare, International Animal Rescue, OneKind, and Seal Protection Action Group are concerned about the intentional killing of seals in and around aquaculture facilities and fisheries for Atlantic salmon (Salmo salar) in Scotland. While recognizing that the United States is a major export market for Scottish farmed salmon, Scotland still permits the killing of seals around aquaculture facilities. The organizations noted that under Part 6 of the Marine (Scotland) Act 2010 it is an offence to kill or injure a seal except under license. In 2017, Marine Scotland issued 28 licenses to shoot seals at fish farms mainly “for protection of health and welfare [of farmed fish]” and one issued for “prevention of serious damage.” These licenses covered a total of 175 individual fish farms, permitted killing of up to 245 grey seals and 113 common seals (Phoca vitulina), and required quarterly returns showing the actual numbers shot. Given that the licenses are issued to 11 - 16 companies, encompassing between 214 and 254 farms, over a vast geographic area, it is unlikely that major
processors will be able to demonstrate that they are not handling some fish that have come from farms where seals have been shot. This is especially true given Atlantic salmon are usually held in marine facilities for between 14 and 24 months from smolt to adult phase.

*Response:* NMFS acknowledges the challenge that salmon aquaculture operations face with either prohibiting the intentional mortality or serious injury of marine mammals in the course of commercial fishing operations in the fishery; or demonstrating that it has procedures to reliably certify that exports of fish and fish products to the United States are not the product of an intentional killing or serious injury of a marine mammal.

If nations fail to establish an outright prohibition of intentional killing or to reliably certify that the product is not associated with intentional killing, NMFS will impose import restrictions under the MMPA Import Rule. NMFS expects that procedures for producing a reliable certification that the product is not associated with intentional killing would include certification programs and tracking and verification schemes. For NMFS to consider that such a scheme can “reliably” certify their claims, the documentary evidence submitted by a harvesting nation must include tracking, verification, and chain of custody procedures ensuring, throughout the entire chain of custody from the farms, to the packers, to the distributors, and finally to the importer — the ability to consistently segregate fish caught without intentional mortality and serious injury of marine mammals.

*Comment 16:* The World Wildlife Fund (WWF) provided a full report with nation-by-nation analysis of marine mammal interactions in commercial fisheries.
Response: NMFS welcomes WWF’s submission. In revising the LOFF, NMFS reviewed and considered the nation-by-nation analysis and, where applicable, included the information and necessary citations in the revised LOFF.

(4) Responses to Questions from the draft LOFF

In the draft LOFF Federal Register notice (82 FR 39762; August 22, 2017), NMFS requested public comment and supporting documentation on a list of questions. NMFS summarizes the responses to these questions below:

1. Should all marine aquaculture involving lines, such as seaweed, mussels, oysters, and other shellfish be considered an exempt fishery? Why or why not?

Comments: NRDC et al., recommended that all marine aquaculture involving lines, such as seaweed, mussels, oysters, and other shellfish be considered an export fishery. WWF stated there is no reason to exempt all such marine aquaculture. Marine mammal bycatch does occur in association with such aquaculture facilities, mainly through entanglement in lines. Large whales may be at risk and there would be particular concerns about this type of aquaculture expanding into whale habitat. India commented that line aquaculture for mussels in India is practiced mainly in inland estuarine systems/shallow bays, limiting the chance of interactions with marine mammals. Similarly, the lines kept for seaweed culture are in shallow coastal waters. Such aquaculture activities are limited to few villages where the production is quite meagre, posing no threat or injury to the marine mammal populations. In India’s opinion these fisheries should be classified as exempt.

Response: At this juncture, NMFS does not have sufficient documentation indicating that there is more than a remote likelihood of bycatch associated with
aquaculture line operations. NMFS is retaining these fisheries as exempt unless they have a documented bycatch of marine mammals.

2. Should net pen aquaculture for tuna be considered an exempt fishery? Why or why not?

Comment: NRDC et al., recommended that net pen aquaculture for tuna should be considered an export fishery based on literature regarding lethal predator control and entanglement. WWF stated that well managed and properly sited aquaculture facilities should not be associated with marine mammal bycatch. However, it would be a mistake to make a blanket exemption for all net pen aquaculture because it does have the potential for entanglement in lines and other associated gear such as anti-predator nets.

Response: Again, NMFS does not have sufficient documentation indicating that there is more than a remote likelihood of bycatch associated with tuna aquaculture net pen operations. NMFS is retaining these fisheries as exempt unless they have a documented bycatch of marine mammals.

3. Should net cage aquaculture for finfish be considered an exempt fishery? Why or why not?

Comment: NRDC et al., recommended that net cage aquaculture for finfish should be considered an export fishery based on literature regarding lethal predator control and entanglement. WWF stated that well-managed and properly sited aquaculture facilities should not be associated with marine mammal bycatch. However, it would be a mistake to make a blanket exemption for all net pen aquaculture because it does have the potential for entanglement in lines and other associated gear such as predator nets. India had no
comments to offer as cage aquaculture of finfish is not commercially practiced in the marine environment in India.

Response: NMFS does not have sufficient documentation indicating that there is more than a remote likelihood of bycatch associated with finfish aquaculture net pen operations. NMFS is retaining these fisheries as exempt unless they have a documented bycatch of marine mammals or engage in the intentional killing or serious injury of marine mammals.

4. Should lift net or other such nets be considered an exempt fishery? Why or why not?

Comment: WWF stated that most lift net fisheries do not appear to be associated with marine mammal bycatch but there is nevertheless potential for bycatch. Specifying exactly what a lift net fishery involved would make a general exemption very difficult. India stated that lift nets are passive gears and mostly operated from land in India (e.g., Chinese dip net). Such nets are operated in shallow backwater areas where mostly low saline environments prevail. The numbers are quite minimal and the nets are small in size, operated by traditional small scale fishermen, posing no threat or injury to the marine mammal populations. Hence they should be considered an exempt fishery.

Response: NMFS agrees. While it does not have sufficient documentation indicating that there is more than a remote likelihood of bycatch associated with finfish aquaculture net pen operations, the size, scale, and operational characteristics of lift nets do not appear capable of capturing marine mammals. NMFS is retaining these fisheries as exempt unless they have a documented bycatch of marine mammals.

5. Would nations prefer to submit their information in the form of a database?
Comment: Few nations commented on those questions, but those that did indicated that they prefer to submit their information using a streamlined and consistent format.

Response: NMFS agrees and is open to developing databases that facilitate the submission of information needed to maintain the LOFF.

6. Should nations with only exempt fisheries be allowed to apply for a comparability finding every eight years rather than every four years?

Comment: NRDC et al., recommended that nations with only exempt fisheries should have to apply for a comparability finding at least every four years to ensure compliance with the import provisions of the MMPA. WWF noted that fisheries practices can change very quickly in response to changes in stocks, quotas or markets. An eight-year option may well miss emerging fisheries with a high bycatch risk. Four years is a good compromise between being too onerous but still allowing for emerging fisheries to be evaluated.

Response: NMFS notes these comments and will continue to consider mechanisms to streamline this process, reduce unnecessary work, while still meeting the mandate of the MMPA.

References


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