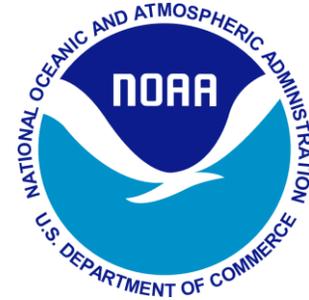


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Draft Environmental Assessment of the List of Fisheries Under Section 118 of the Marine Mammal Protection Act

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Abstract

In 1994, Congress amended the MMPA to address the incidental mortality and serious injury (bycatch) of marine mammals in U.S. commercial fisheries. MMPA section 118 established a system for classifying commercial fisheries according to their levels of marine mammal bycatch and created the take reduction plan (Plan) process to reduce that bycatch. The National Marine Fisheries Service (NMFS) is required to reexamine this classification of commercial fisheries, known as the List of Fisheries (LOF), at least annually and publish any changes in the *Federal Register*. This environmental assessment analyzes the process by which NMFS currently classifies U.S. commercial fisheries on the LOF. The preferred alternative, also the no action alternative, proposes to continue the current classification scheme. No significant impacts are anticipated as a result of the proposed action.

EXECUTIVE SUMMARY

Serious injury and mortality of marine mammals incidental to commercial fishing operations (bycatch) is a primary threat to many marine mammal species. In 1994, Congress amended the MMPA to address the incidental mortality and serious injury of marine mammals in U.S. commercial fisheries. MMPA section 118 established a system for classifying commercial fisheries according to their levels of marine mammal bycatch and created the take reduction plan (Plan) process to reduce that bycatch (NMFS 1995b, 1995c). The National Marine Fisheries Service (NMFS) is required to reexamine this classification of commercial fisheries, known as the List of Fisheries (LOF), at least annually and publish any changes in the *Federal Register* after notice and opportunity for public comment. This environmental assessment (EA) analyzes this fisheries classification process

NMFS has identified Alternative 1, the No Action Alternative as the preferred alternative for the proposed action. Alternative 1 would maintain the status quo, thus not presenting any changes to NMFS' current process for classifying U.S. commercial fisheries on the LOF. NMFS would continue to categorize each commercial fishery based on the two-tiered approach and the current definitions of Category I, II, and III fisheries.

Under the two action alternatives, Alternatives 2a and 2b, NMFS would use an alternate scheme to classify U.S. commercial fisheries according to the level of serious injury and mortality of marine mammals incidental to each fishery. Specifically, NMFS would continue to use a two-tiered, stock specific approach, but would change the definitions of Category II and III fisheries. Therefore, the action alternatives differ in the threshold (5% versus 0.5%) used to differentiate Category II fisheries from Category III fisheries.

Alternative 2a would define a Category II fishery as one that annually incidentally seriously injures or kills a particular stock at levels greater than 5% and less than 50% of that stock's PBR. Therefore, a fishery would be classified in Category III if less than 5% annual mortality and serious injury of a stock occurs incidental to that fishery.

Alternative 2b would define a Category II fishery as one that annually incidentally seriously injures or kills a particular stock at levels greater than 0.5% and less than 50% of that stock's PBR. Therefore, a fishery would be classified in Category III if less than 0.5% annual mortality and serious injury of a stock occurs incidental to that fishery.

Alternative 2a would potentially result in the fewest number of fisheries classified in Category II and therefore, fewer fisheries would potentially be required to reduce bycatch through take reduction planning. Further, if these fisheries were not required to have observer coverage, NMFS's ability to accurately estimate fisheries bycatch would diminish. Alternative 2a would be the least protective of marine mammal stocks and thus not consistent with the objectives of the MMPA.

Alternative 2b would potentially result in the greatest number of fisheries classified in Category II and therefore, more fisheries would potentially be required to reduce bycatch through take reduction planning. Under this conservative approach, Alternative 2b potentially protects the greatest number of marine mammal stocks. However, regardless of the number of fisheries in

Category II, NMFS is limited with respect to how many fisheries could actually be addressed through take reduction planning. Thus, in terms of conservation impacts, Alternative 2b does not differ from the No Action alternative.

Because Alternative 2a would affect the greatest number of fisheries, it would have the largest number of potential, minor, direct and indirect, negative impacts on fishery socioeconomics. Alternative 2b would have the fewest of such impacts, while Alternative 1 would result in no new impacts. Under all alternatives, impacts on fishermen are expected to be minor. Generally, the opportunity costs are lost fishing time and potential income while a take reduction team meets. The opportunity costs to all fishery participants would result from potential take reduction measures, such as time and area closures, that may reduce their fishing effort. Direct costs to fishers would be based on future take reduction plan (Plan) measures. All future Plan measures would be analyzed in subsequent NEPA documents before being finalized. In addition to time and area restrictions as mentioned above, such measures could include gear modification or replacement, which would likely result in direct costs to the fishermen as they would have to alter their gear or purchase new types of gear.

The preferred alternative, Alternative 1, would not result in any significant, adverse impacts on the human environment, including protected marine populations, commercial fisheries, fishermen, or other regulatory programs. None of the alternatives would be likely to adversely affect essential fish habitat or species listed under the Endangered Species Act.

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ACRONYMS AND ABBREVIATIONS

BSAI	Bering Sea and Aleutian Islands
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CZMA	Coastal Zone Management Act
EA	Environmental assessment
EFH	Essential fish habitat
EIS	Environmental impact statement
ESA	Endangered Species Act
FMP	Fishery management plan
FONSI	Finding of No Significant Impact
FR	<i>Federal Register</i>
LOF	List of Fisheries
MMAP	Marine Mammal Authorization Program
MMPA	Marine Mammal Protection Act
MSA	Magnuson-Stevens Fishery Conservation and Management Act
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
N_{\min}	Minimum population estimate
NOAA	National Oceanic and Atmospheric Administration
PBR	Potential biological removal
Plan	Take reduction plan
R_{\max}	Maximum net productivity rate
RFA	Regulatory Flexibility Act
SAR	Stock assessment report
SRG	Scientific review group
T_{ins}	Insignificance threshold
TRT	Take reduction team
USFWS	United States Fish and Wildlife Service
ZMRG	Zero Mortality Rate Goal

1.0 PURPOSE AND NEED

1.1 Introduction

Serious injury and mortality of marine mammals incidental to commercial fishing operations (bycatch) is a primary threat to many marine mammal species. The Marine Mammal Protection Act (MMPA) of 1972 states that marine mammal species and stocks should not be permitted to diminish beyond the point at which they cease to be a significant functioning element in the ecosystem of which they are a part. In 1994, Congress amended the MMPA to address the incidental mortality and serious injury (bycatch) of marine mammals in U.S. commercial fisheries. MMPA section 118 established a system for classifying commercial fisheries according to their levels of marine mammal bycatch and created the take reduction plan (Plan) process to reduce that bycatch (NMFS 1995b, 1995c). The National Marine Fisheries Service (NMFS) is responsible for implementing section 118 of the MMPA. NMFS is required to reexamine this classification of commercial fisheries, known as the List of Fisheries (LOF), at least annually and publish any changes in the *Federal Register* after notice and opportunity for public comment.

In 1995, NMFS prepared an environmental assessment (EA) on the proposed regulations to govern interactions between marine mammals and commercial fishing operations, including the fisheries classification scheme, under section 118 of the MMPA (NMFS 1995a). In 2005, NMFS updated the EA (NMFS 2005a). In 2009, NMFS reviewed the EA and concluded that no update was necessary because there have been no changes to the process used to develop the LOF and implement section 118 of the MMPA. In order to keep our National Environmental Policy Act (NEPA) documents up-to-date, NMFS is preparing a revised EA regarding the LOF classification scheme to reflect changes to the affected environment and any modifications to individual fishery classifications. Unless the system is changed in the interim, this EA will serve as the NEPA document for at least the next five years. At that time, it will be reviewed to determine if there are any changes or circumstances warranting revision.

This EA was prepared pursuant to NEPA of 1969, the Council on Environmental Quality's Regulations for Implementing NEPA (40 Code of Federal Regulations [CFR] 1500-1508), and the NOAA environmental review procedures (NOAA 1999). This EA analyzes the environmental impacts of continuing the existing scheme for classifying fisheries on the LOF as well as implementing several alternatives for classifying commercial fisheries under the MMPA. All references are available by request.

1.2 MMPA Elements Related to the List of Fisheries

1.2.1 Stock Assessments

MMPA section 117 requires the Secretary of Commerce, in consultation with the appropriate regional scientific review group, to prepare draft stock assessment reports (SARs) for each

marine mammal stock that occurs in U.S. waters. NMFS is responsible for preparing SARs, using the best available scientific information. Each SAR must:

- 1) Describe the geographic range, including seasonal and temporal variations, of the affected stock;
- 2) Provide a minimum population estimate (N_{\min}), current and maximum net productivity rates, and current population trend;
- 3) Estimate of the annual human-caused mortality and serious injury of the stock by source and, for a strategic stock, other factors that may cause a decline or impede recovery of the stock, including effects on marine mammal habitat and prey;
- 4) Describe commercial fisheries that interact with the stock, specifically:
 - a) The approximate number of vessels actively participating in each fishery,
 - b) The estimated level of incidental mortality and serious injury of the stock by each fishery on an annual basis,
 - c) Seasonal or area differences in such incidental mortality or serious injury, and
 - d) The rate, based on fishing effort, of such mortality and serious injury, and an analysis of whether this rate is insignificant and approaching zero;
- 5) Categorize the status of the stock as either a strategic stock or one that has a level of human-caused mortality and serious injury that is not likely to reduce the stock below its optimum sustainable population; and
- 6) Estimate the potential biological removal (PBR) level for each stock.

Pursuant to MMPA section 117, NMFS estimates PBR levels for each marine mammal stock according to the definitions in the MMPA. NMFS reports these PBR levels in individual SARs. Similar to estimating PBR, assigning serious injuries and mortalities to a particular stock also occurs during the stock assessment process. Each SAR is vetted through the appropriate SRG, who in turn reviews the reports based on their scientific expertise. Draft SARs are also available for public comment.

The process for estimating PBR (i.e., establishing N_{\min} and recovery factors) under MMPA section 117 is a separate process that occurs before such information is used in the process for classifying fisheries on the LOF under MMPA section 118. This is also true for assigning serious injuries and mortalities to individual stocks. A recent policy directive, Process for Distinguishing Serious from Non-Serious Injury of Marine Mammals, details the process for assigning serious injuries (NMFS 2012). Members of the public who wish to comment on elements of the stock assessment process would need to do so during the comment period on draft SARs.

1.2.2 Potential Biological Removal Level

The MMPA defines the PBR level for a marine mammal stock as the “maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock

while allowing that stock to reach or maintain its optimum sustainable population” (United States Congress 1997). NMFS currently uses PBR as a component in classifying commercial fisheries on the LOF.

Potential Biological Removal (PBR)

For any marine mammal stock,

$$\text{PBR} = N_{\min} * 0.5R_{\max} * F_r$$

where N_{\min} = the minimum population estimate of the stock

R_{\max} = the maximum theoretical or estimated net productivity rate of the stock at a small population size

F_r = a recovery factor of between 0.1 and 1.0

NMFS regulations indicate more specifically how to use the above equation to calculate PBR for marine mammal stocks (50 CFR 229.2). For example, if insufficient data exist to calculate R_{\max} properly for a particular stock, default values are used. For cetaceans, the default R_{\max} is four percent ($0.5R_{\max} = 0.02$). For pinnipeds, the default R_{\max} is 12 percent ($0.5R_{\max} = 0.06$).

Default values of F_r have been assigned according to stock status. For healthy stocks, F_r equals 1.0; for endangered stocks, F_r equals 0.1; and for stocks with a threatened, depleted, or unknown status, F_r equals 0.5. However, flexibility allows for adjustment of the default F_r on a stock-specific basis if ample scientific data exist.

1.2.3 Zero Mortality Rate Goal

In the 1994 MMPA amendments, Congress established a requirement for fisheries to reduce incidental mortality and serious injury of marine mammals to insignificant levels approaching a zero rate. This requirement is known as the Zero Mortality Rate Goal (ZMRG). To implement the ZMRG, NMFS issued a final regulation (NMFS 2004c) that defined a stock’s “insignificance threshold” as 10 percent of the PBR level of a stock of marine mammals. This insignificance threshold is the upper limit of annual incidental mortality and serious injury of marine mammals in commercial fisheries that NMFS considers as insignificant levels approaching a zero mortality and serious injury rate.

1.3 Current Fishery Classification Process

NMFS classifies commercial fisheries on the LOF based on marine mammal bycatch information contained in annual stock assessment reports as well as other sources of new information. Pursuant to MMPA section 118(c)(1)(A), each fishery is classified in one of the three following categories:

- Commercial fisheries with frequent incidental mortality and serious injury of marine mammals.
- Commercial fisheries with occasional incidental mortality and serious injury of marine mammals.
- Commercial fisheries with a remote likelihood of or no known incidental mortality and serious injury of marine mammals.

The delineations for determining the “frequent,” “occasional,” and “remote likelihood of or no known” thresholds are based on a two-tiered approach. Tier 1 assesses cumulative impacts (incidental mortalities and serious injuries of marine mammals due to commercial fishing operations) across all fisheries on a particular stock. If bycatch across all fisheries is less than or equal to ten percent of that stock’s PBR, all fisheries interacting with that stock are classified in Category III for that particular stock. If bycatch across all fisheries is greater than 10% of a stock’s PBR, then the fisheries are subject to Tier 2, which addresses impacts of individual fisheries on each marine mammal stock. According to NMFS’ Tier 2 criteria:

- Category I includes fisheries with incidental mortality and serious injury greater than or equal to 50 percent of the stock’s PBR.
- Category II includes fisheries with incidental mortality and serious injury between one and 50 percent of the stock’s PBR.
- Category III includes fisheries with incidental mortality and serious injury less than or equal to one percent of the stock’s PBR.

While Tier 1 considers the cumulative fishery mortality and serious injury for a particular stock, Tier 2 considers fishery-specific mortality and serious injury for a particular stock. Additional details regarding how the categories were determined are provided in the preambles to the proposed and final rules implementing section 118 of the MMPA (NMFS 1995b, 1995c).

Since fisheries are categorized on a per-stock basis, a fishery may qualify as one Category for one marine mammal stock and another Category for a different marine mammal stock. A fishery is categorized on the LOF at its highest level of classification (e.g., a fishery that qualifies for Category III for one marine mammal stock and for Category II for another marine mammal stock is listed under Category II).

In the absence of available data to determine the frequency of marine mammal incidental takes in a particular commercial fishery, NMFS determines such classifications based on other factors including fishing techniques, gear type, marine mammal deterrent methods, target species, seasons and areas fished, qualitative data from logbooks and fisher reports, stranding data, and marine mammal species and distributions. NMFS does not consider economic factors during the fishery classification process.

1.3.1 Requirements for all Commercial Fisheries

1.3.1.1 Reporting Requirements

In accordance with MMPA section 118(e) and 50 CFR 229.6, any vessel owner or operator, or fisher (in the case of non-vessel fisheries), participating in a Category I, II, or III fishery must report all incidental injuries or mortalities of marine mammals that occur during commercial fishing operations to NMFS within 48 hours. “Injury” is defined in 50 CFR 229.2 as a wound or other physical harm. In addition, any animal that ingests fishing gear or any animal that is released with fishing gear entangling, trailing, or perforating any part of the body is considered injured, regardless of the absence of any wound or other evidence of an injury, and must be reported.

1.3.2 Requirements for Category I and II Fisheries

1.3.2.1 Registration Requirements

Owners of vessels or gear engaging in a Category I or II fishery are required under the MMPA (16 U.S.C. 1387(c)(2)), as described in 50 CFR 229.4, to register with NMFS and obtain a marine mammal authorization from NMFS in order to lawfully incidentally seriously injure or kill a marine mammal during commercial fishing operations. Fishers must pay a \$25 fee to register with the Marine Mammal Authorization Program (MMAP) by contacting the relevant NMFS Regional Office unless they participate in a fishery that has a registration program that has been integrated with another permit program. Upon receipt of a completed registration, NMFS issues vessel or gear owners physical evidence of a current and valid registration that must be displayed or in the possession of the master of each vessel while fishing in accordance with section 118 of the MMPA (16 U.S.C. 1387(c)(3)(A)). For some fisheries, NMFS has integrated the MMAP registration process with existing state and Federal fishery license, registration, or permit systems and related programs. Participants in these fisheries are automatically registered under the MMAP and are not required to submit registration or renewal materials or pay the \$25 registration fee.

1.3.2.2 Monitoring Requirements

MMPA section 118(d) requires NMFS to establish a program to monitor bycatch of marine mammals during the course of commercial fishing operations. The purposes of the observer program include obtaining statistically reliable bycatch estimates, determining the reliability of the reporting requirement, and identifying changes in fishing methods or technologies that may affect bycatch rates.

MMPA section 118(c)(3)(B) requires fishers participating in a Category I or II fishery to accommodate an observer aboard vessel(s) upon request (50 CFR 229.7). Observers provide NMFS with a record of the number and type of marine mammals incidentally killed or seriously injured, species/stocks of marine mammals sighted, and bycatch of other non-target species. Observers may also perform other scientific research, such as sampling and photographing

incidental marine mammal mortalities and serious injuries. There is no cost to fishers for MMPA observer coverage requirements.

Because resources for observer coverage are limited, NMFS allocates available funding on an annual basis using the priority scheme set out in MMPA section 118(d)(4) (see below). NMFS balances MMPA monitoring requirements with competing monitoring requirements mandated under the Magnuson-Stevens Act and the Endangered Species Act (ESA).

When determining how best to allocate observers among commercial fisheries, the MMPA identifies the following priorities:

- The highest priority commercial fisheries are those that seriously injure or kill marine mammals listed on the ESA,
- The second highest priority commercial fisheries are those that seriously injure or kill strategic marine mammals, and
- The third highest priority commercial fisheries are those for which the level of incidental mortality and serious injury is uncertain.

1.3.2.3 Take Reduction Planning

For all strategic stocks that interact with Category I or II commercial fisheries, the MMPA requires the formation of a take reduction team (TRT) to prepare a take reduction plan (Plan). TRTs must include a balanced representation of various stakeholders listed under the MMPA. Plans are designed to prevent further decline and to assist in the recovery of a strategic marine mammal stock that interacts with Category I or II commercial fisheries.

Strategic Stock

A **strategic stock** is a marine mammal stock for which the level of direct human-caused mortality exceeds PBR; which, based on the best available scientific information, is declining and is likely to be listed as a threatened species under the ESA within the foreseeable future; or which is listed as a threatened species or an endangered species under the ESA or is designated as depleted under the MMPA.

NMFS may also convene a TRT and/or develop a Plan for Category I fisheries that have high incidental mortality and serious injury across a number of strategic marine mammal stocks. However, if NMFS has insufficient funds to develop and implement all required Plans, the MMPA allows NMFS discretion when prioritizing development of Plans. NMFS may prioritize based on those marine mammal stocks with incidental mortality and serious injury exceeding PBR, stocks with small population size, and stocks with the highest rate of decline.

The immediate goal of a take reduction plan is to reduce, within six months of implementation, incidental mortality and serious injury of a strategic stock to a level below PBR. The long-term goal of a Plan is to reduce, within five years of implementation, the incidental mortality and

serious injury to insignificant levels approaching a zero mortality and serious injury rate, taking into account available technology (such as modified fishing gear and techniques), economic feasibility, and state and regional fishery management plans (FMPs) when designing the Plan's strategy for reducing incidental mortality and serious injury of particular stocks in specific fisheries. NMFS considers the draft Plan submitted by the TRT, develops regulations to implement the plan, allows for public review and comment on the draft plan, and subsequently issues final regulations to implement the plan. NMFS analyzes the potential environmental impacts of a Plan pursuant to NEPA during the development of individual Plans.

1.4 Summary of Purpose and Need

NMFS is responsible for implementing the MMPA. Section 118 of the MMPA describes regulations concerning incidental taking of marine mammals during commercial fishing operations. The objective of these regulations is to reduce mortality and serious injury of marine mammals incidental to commercial fisheries. Therefore, as a first step, NMFS must classify commercial fisheries according to the level of serious injury and mortality occurring incidental to each U.S. commercial fishery. Subsequently, NMFS may use the LOF as a basis for taking additional actions necessary to reduce serious injury and mortality of marine mammals. For example, NMFS may convene a take reduction team and/or develop a take reduction plan for Category I and II fisheries interacting with strategic stocks. The immediate goal of a Plan is to reduce, within six months of its implementation, serious injury and mortality of strategic marine mammal stocks incidentally taken during commercial fishing operations to levels below PBR. The long-term goal of a Plan, and the ultimate goal of MMPA section 118, is to reduce serious injury and mortality of marine mammals incidental to commercial fisheries to insignificant levels approaching a zero rate, i.e., the ZMRG, taking into account the economics of the fishery, the availability of existing technology, and existing State or regional fishery management plans. This EA analyzes the environmental impacts associated with the process of classifying U.S. commercial fisheries on the LOF and any annual modifications to the LOF. Additional NEPA documents will be prepared for any future Plans.

1.5 Other Environmental Requirements Considered

Although this EA pertains specifically to the MMPA, the LOF must also be consistent with other applicable laws and regulations, as discussed in the below sections.

1.5.1 Endangered Species Act

The ESA provides broad protection for species of fish, wildlife, and plants that are listed as threatened or endangered in the U.S. or elsewhere. According to the ESA, it is unlawful for any person subject to the jurisdiction of the United States to "take" any such species within the United States or the high seas, without an incidental take statement. The ESA defines "take" as to harass, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct to species listed as threatened or endangered in 50 CFR 402.12. (See section 3.1)

1.5.2 Coastal Zone Management Act

The Coastal Zone Management Act (CZMA) provides assistance to states, in cooperation with Federal and local agencies, for developing land and water use programs for the coastal zone. This includes the protection of natural resources and management of coastal development. A state's coastal zone management program implements policy pursuant to the CZMA. The proposed action does not affect the land or water uses or natural resources of the coastal zone, as specified under section 307 of the CZMA.

1.5.3 Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act (MSA), enacted to conserve and restore the nation's fisheries, requires regional fisheries councils to describe and identify essential fish habitat (EFH), defined as those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity. Under the MSA, Federal agencies must consult with the Secretary of Commerce regarding any activity, or proposed activity, authorized, funded, or undertaken by the agency that may adversely affect EFH. The MSA also requires FMPs to prevent overfishing and to include conservation and management measures that minimize bycatch and bycatch mortality to the extent practicable. (See section 4.3)

1.5.4 Significance Under Executive Order 12866: Regulatory Planning and Review

In determining that the proposed action of classifying U.S. commercial fisheries on the LOF pursuant to MMPA section 118(c)(1)(C) is insignificant under E.O. 12866, the following criteria were considered. The proposed action does not:

- Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;
- Create serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or
- Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

NMFS has used the same classification scheme to categorize fisheries and publish the LOF each year since its inception in 1996 as mandated by MMPA section 118(c)(1)(C) and implemented by 50 CFR 229.8.

1.5.5 Regulatory Impact Review

NMFS must categorize each commercial fishery on the LOF into one of three categories under the MMPA based upon the level of serious injury and mortality of marine mammals that occurs incidental to each fishery. The categorization of a fishery on the LOF determines whether participants in the fishery are subject to certain provisions of the MMPA, such as registration, observer coverage, and take reduction plan requirements (see sections 1.1 and 1.3 of this EA). A description of U.S. commercial fisheries is in section 3.2 of this EA. The No Action (preferred) alternative is described in section 2.1 of this EA. Efforts to reduce incidental mortality and serious injury of marine mammals are thought to yield economic benefits associated with the intrinsic value of maintaining large and healthy populations. The only cost of the proposed action is the \$25 registration fee as described below. Approximately 347 vessels are required to pay a total of \$8,675.

1.5.6 Regulatory Flexibility Act Analysis

Under existing regulations, all fishers participating in Category I or II fisheries must register under the MMPA, obtain an Authorization Certificate, and pay a fee of \$25. Additionally, fishers may be subject to a take reduction plan and requested to carry an observer. The Authorization Certificate authorizes the taking of marine mammals incidental to commercial fishing operations. NMFS has estimated that approximately 58,900 fishing vessels, most of which are small entities, operate in Category I or II fisheries, and therefore, are required to register. However, registration has been integrated with existing state or Federal registration programs for the majority of these fisheries so that the majority of fishers do not need to register separately under the MMPA. Though the LOF may affect a number of small entities, the \$25 registration fee for vessels not integrated with existing state or Federal registration programs, with respect to anticipated revenues, is not considered a significant economic impact. If a vessel is requested to carry an observer, fishers will not incur any economic costs associated with carrying that observer. As a result of this certification, an initial regulatory flexibility analysis was not prepared. In the event that reclassification of a fishery to Category I or II results in a take reduction plan, economic analyses of the effects of that plan will be summarized in subsequent rulemaking actions.

2.0 ALTERNATIVES

MMPA section 118(c)(1) requires NMFS to classify commercial fisheries according to the following categories:

- I. Frequent incidental mortality and serious injury of marine mammals,
- II. Occasional incidental mortality and serious injury of marine mammals, or
- III. A remote likelihood of or no known incidental mortality and serious injury of marine mammals.

The following alternatives present and discuss different options for further defining categories of fisheries based on their level of marine mammal bycatch.

2.1 Alternative 1: No Action Alternative (Preferred)

NMFS has identified Alternative 1 as the preferred alternative for the proposed action. Alternative 1, the No Action Alternative, would maintain the status quo, thus not presenting any changes to NMFS' current process for classifying U.S. commercial fisheries on the LOF. NMFS would continue to categorize each commercial fishery based on the two-tiered approach and the definitions of Category I, II, and III as detailed in 50 CFR 229.2 and as described in section 1.3 of this EA. Alternative 1 adheres to the MMPA implementing regulations for publication of the List of Fisheries as set forth in 50 CFR 229.8.

Under Alternative 1, NMFS would classify U.S. commercial fisheries according to the following definitions:

Category I: Annual incidental mortality and serious injury of a stock from a given fishery is greater than or equal to 50% of the PBR of that stock.

Category II: Annual incidental mortality and serious injury of a stock from a given fishery is greater than 1% and less than 50% of the PBR of that stock.

Category III: Annual incidental mortality and serious injury of a stock from a given fishery is less than or equal to 1% of the PBR of that stock.

2.2 Alternative 2

Under Alternative 2, NMFS would use an alternate scheme to classify U.S. commercial fisheries according to the level of serious injury and mortality of marine mammals incidental to each fishery. Alternative 2 would require NMFS to change its implementing regulations for classifying U.S. commercial fisheries on the LOF. Promulgating new regulations would require NMFS to change the definitions of Category II and III from the current definitions found in 50 CFR 229.2 and described in section 1.3 of this EA. The rulemaking process generally takes longer than one year. If NMFS were to undertake rulemaking to change the current fisheries classification scheme, NMFS would fail to meet the requirements for publishing an LOF this year as detailed in section 118(c)(1)(C) of the MMPA. NMFS could, however, initiate the rulemaking process to implement an alternate scheme to classify U.S. commercial fisheries in future LOFs.

Under Alternative 2, the Tier 1 threshold would remain the same, while the Tier 2 threshold would be modified. Specifically, the threshold that separates Category II and Category III fisheries would be changed in both Alternatives 2a (5% of a stock's PBR) and 2b (0.5% of a stock's PBR). Alternative 2 focuses on the thresholds between Categories II and III because any conservation and regulatory impacts would be realized at that level. The threshold between Category I and II fisheries (50% of a stock's PBR) would remain unchanged because the regulatory requirements for Category I and II fisheries are identical. Additionally, the effects of changing Tier 1 thresholds were analyzed in an environmental assessment for implementing the ZMRG under MMPA section 118(b) (NMFS 2004d).

2.2.1 Alternative 2a

Under Alternative 2a, NMFS would classify U.S. commercial fisheries on the LOF according to the following definitions:

Category I: Annual incidental mortality and serious injury in a stock from a given fishery is greater than or equal to 50% of the PBR of that stock.

Category II: Annual incidental mortality and serious injury in a stock from a given fishery is greater than 5% and less than 50% of the PBR of that stock.

Category III: Annual incidental mortality and serious injury in a stock from a given fishery is less than or equal to 5% of the PBR of that stock.

NMFS originally considered 5% of PBR as the threshold between Category II and Category III in the 1995 EA on MMPA section 118. However, NMFS decided to reconsider this threshold because the 1995 EA considered serious injury and mortality during a 20-day period rather than the 5-year period that NMFS currently uses for estimating annual serious injury and mortality in the SARs. (NMFS 1995a)

2.2.2 Alternative 2b

Under Alternative 2b, NMFS would classify U.S. commercial fisheries on the LOF according to the following definitions:

Category I: Annual incidental mortality and serious injury in a stock from a given fishery is greater than or equal to 50% of the PBR of that stock.

Category II: Annual incidental mortality and serious injury in a stock from a given fishery is greater than 0.5% and less than 50% of the PBR of that stock.

Category III: Annual incidental mortality and serious injury in a stock from a given fishery is less than or equal to 0.5% of the PBR of that stock.

2.3 Alternative 3

Under Alternative 3, NMFS would not classify U.S. commercial fisheries according to the definitions found in 50 CFR 229.2 and section 1.3 of this EA and, therefore, not publish an LOF. This alternative is inconsistent with the MMPA and NMFS' regulations for classifying commercial fisheries and publishing the LOF. Therefore, Alternative 3 is not considered further in this EA.

3.0 AFFECTED ENVIRONMENT

Marine mammal stocks are subject to numerous anthropogenic threats including, but not limited to, fisheries, vessel strikes, marine pollution, and noise. Because the LOF applies only to U.S. commercial fisheries that incidentally take marine mammals, this chapter focuses on the status of protected marine populations and a description of active U.S. commercial fisheries.

3.1 Status of Protected Marine Populations

The following sections discuss the status of marine populations that are protected by the MMPA and/or the ESA.

3.1.1 Marine Mammals

The 2012 SARs (Allen and Angliss 2013, Caretta *et al.* 2013, and Waring *et al.* 2013) discuss comprehensively the status of marine mammal populations in U.S. waters. The information presented in the 2012 SARs, *Environmental Assessment of Proposed Regulations to Govern Interactions between Marine Mammals and Commercial Fishing Operations, under Section 118 of the Marine Mammal Protection Act* (NMFS 1995a), and in the *Environmental Assessment of the List of Fisheries Under Section 118 of the Marine Mammal Protection Act* (NMFS 2005a) are incorporated here by reference.

Table 3-1 lists all domestic depleted, threatened, and endangered marine mammal stocks as well as stocks that are candidate species for ESA listing. By definition, “strategic” includes all marine mammal species listed as depleted, threatened, or endangered.

Recovery plans exist for the blue whale (NMFS 1998a), fin whale (NMFS 2010b), Hawaiian monk seal (NMFS 2007), humpback whale (NMFS 1991), killer whale (NMFS 2008c), North Atlantic right whale (NMFS 2005b), North Pacific right whale (NMFS 2013a), sei whale (NMFS 2011a), sperm whale (NMFS 2010c), and Steller sea lion (NMFS 2008d). The recovery plans contain more current information on each species and are available by request.

Also, as required by the MMPA, a Conservation Plan exists for the North Pacific fur seal (NMFS 2007c) and for the Cook Inlet beluga whale stock (NMFS 2008b), and are available by request.

**Table 3-1
Domestic Depleted and ESA-listed or ESA-Candidate Marine Mammal Stocks**

Common Name	Scientific Name	Status*
Bearded Seal (Beringia stock)	<i>Erignathus barbatus</i>	T
Blue Whale	<i>Balaenoptera musculus</i>	E
Bottlenose Dolphin (Western North Atlantic coastal migratory stock)	<i>Tursiops truncatus</i>	D
Bowhead Whale	<i>Balaena mysticetus</i>	E, D
Cook Inlet Beluga Whale	<i>Delphinapterus leucas</i>	E, D
False Killer Whale (MHI insular stock)	<i>Pseudorca crassidens</i>	E
Fin Whale	<i>Balaenoptera physalus</i>	E
Guadalupe Fur Seal	<i>Arctocephalus townsendi</i>	T
Hawaiian Monk Seal	<i>Monachus schauinslandi</i>	E, D
Humpback Whale	<i>Megaptera novaeangliae</i>	E
Killer Whale (Eastern North Pacific Southern Resident stock)	<i>Orcinus orca</i>	E, D
Killer Whale (AT1 transient stock)	<i>Orcinus orca</i>	D
North Atlantic Right Whale	<i>Eubalaena glacialis</i>	E
North Pacific Right Whale	<i>Eubalaena japonica</i>	E
North Pacific Fur Seal	<i>Callorhinus ursinus</i>	D
Northern Sea Otter	<i>Enhydra lutris kenyoni</i>	T
Ringed Seal (Arctic stock)	<i>Phoca hispida hispida</i>	T
Sei Whale	<i>Balaenoptera borealis</i>	E
Southern Sea Otter**	<i>Enhydra lutris nereis</i>	T
Sperm Whale	<i>Physeter macrocephalus</i>	E
Steller Sea Lion (Western DPS)	<i>Eumetopias jubatus</i>	E
West Indian Manatee	<i>Trichechus manatus</i>	E

* E = endangered, T = threatened, C = candidate for ESA-listing, D = depleted
** The Southern sea otter, also called the California sea otter, is exempt from MMPA section 118.
Sources: NMFS 2013i, USFWS 2013

3.1.2 Sea Turtles

All six sea turtles that occur in U.S. waters are listed under the ESA (see Table 3-2). NMFS and USFWS finalized recovery plans between the years of 1991 and 1998 for each species, and revised plans for Western North Atlantic loggerheads in 2009 and Kemp's ridleys in 2011. Entanglement in fishing gear, or bycatch, is generally the largest threat to sea turtle recovery. NMFS requires modifications to fishing gear (e.g., turtle excluder devices) and time-area closures to help reduce sea turtle bycatch in some commercial fisheries. Habitat loss, egg poaching, marine debris, beach nourishment, and artificial lighting are also common threats to sea turtles.

**Table 3-2
Sea Turtles that Occur in U.S. Waters**

Common Name	Scientific Name	Status*
Green Turtle	<i>Chelonia mydas</i>	E, T**
Hawksbill Turtle	<i>Eretmochelys imbricata</i>	E
Kemp's Ridley Turtle	<i>Lepidochelys kemp</i>	E
Leatherback Turtle	<i>Dermochelys coriacea</i>	E
Loggerhead Turtle	<i>Caretta caretta</i>	E, T***
Olive Ridley Turtle	<i>Lepidochelys olivacea</i>	E, T**
* E = endangered, T = threatened ** Status assigned according to population; *** Status assigned according to DPS Source: NMFS 2013f		

3.1.2.1 Green Turtle

The green turtle is a circumglobal species found in tropical and subtropical waters. Post-hatchling and small juvenile green turtles reside in oceanic waters. Adults are predominantly tropical and spend most of their time in shallow, nearshore areas. However, they are known to undertake long oceanic migrations between nesting and foraging habitats.

All green turtle populations are threatened except the breeding populations off Florida and the Pacific coast of Mexico, which are endangered. Since the 1978 listing, the populations have not improved significantly (NMFS 2013f). The recovery plans for the Atlantic, Pacific, and East Pacific populations of green turtles were finalized in 1991, 1998, and 1998, respectively. These recovery plans contain more detailed information on the species and are available on the internet (NMFS and USFWS 1991a, 1998a, and 1998b).

3.1.2.2 Hawksbill Turtle

Hawksbill sea turtles are found in tropical and subtropical seas of the Atlantic, Pacific, and Indian Oceans. They are found along the continental U.S. coastline from Massachusetts southward, including all of the Gulf coast states; however, sightings north of Florida are rare. Like the green turtle, post-hatchling hawksbills are pelagic, and adults return to a variety of shallow coastal habitats including rocky outcrops, coral reefs, lagoons on oceanic islands, and estuaries.

The hawksbill has been endangered since its 1970 listing on the ESA (NMFS 2013f). The recovery plans for the Atlantic and Pacific populations of hawksbill turtles were finalized in 1993 and 1998, respectively. These recovery plans contain more detailed information on the species and are available on the internet (NMFS and USFWS 1993, 1998c).

3.1.2.3 Kemp's Ridley Turtle

The Kemp's ridley turtle is not as widely distributed as other sea turtle species. Adults are generally restricted to the coastal areas of the Gulf of Mexico and the northwestern Atlantic Ocean. Nesting occurs primarily on a single beach near Rancho Nuevo in the state of

Tamaulipas, which is located on the northeastern coast of Mexico. There are a few additional nests in Texas, Florida, South Carolina, and North Carolina.

The Kemp's ridley turtle has been endangered since its listing on the ESA in 1970. After long periods of decline, the population currently appears either stable or in the early stages of recovery due to protective measures (NMFS 2013f). The Kemp's ridley turtle recovery plan, finalized in 2011, contains more detailed information on the species and is available on the internet (NMFS and USFWS 1992b, NMFS, USFWS, and SEMARNAT 2011).

3.1.2.4 Leatherback Turtle

The leatherback is the largest living turtle (NMFS 2013f). Leatherback turtles are distributed worldwide in tropical and temperate waters of the Atlantic, Pacific, and Indian Oceans. Adult leatherbacks are highly migratory and are the most pelagic of all sea turtles. Females are often observed near the edge of the U.S. continental shelf, but do not frequently nest on U.S. beaches.

Leatherbacks were listed on the ESA as endangered in 1970. The recovery plans for the Atlantic and Pacific populations of leatherback turtles were finalized in 1992 and 1998, respectively. These recovery plans contain more detailed information on the species and are available on the internet (NMFS and USFWS 1992a, 1998d).

3.1.2.5 Loggerhead Turtle

Loggerhead turtles are found in tropical, subtropical, and temperate waters throughout the world. The loggerhead is the most abundant sea turtle in U.S. coastal waters. They frequent continental shelves, bays, estuaries, and lagoons. Interactions with fishing gear continue to impede recovery efforts.

Loggerheads were listed as threatened in 1978 and in 2011 they were divided into 9 distinct population segments (DPS). Two segments occur in U.S. waters; the Northwest Atlantic Ocean DPS is listed as threatened and the North Pacific Ocean DPS is listed as endangered (NMFS 2013f). The recovery plan for the Pacific populations of loggerhead turtles was finalized in 1998. The Northwest Atlantic plan was finalized in 2009. These recovery plans contain more detailed information on the species and are available on the internet (NMFS and USFWS 1991b, 1998e, 2009).

3.1.2.6 Olive Ridley Turtle

Olive ridley turtles are predominantly tropical and generally more abundant in the Atlantic Ocean than in the Pacific Ocean. Olive ridley turtles form huge nesting aggregations (known as "arribadas") at several beaches along the Mexican Pacific coast, with the largest concentration at La Escobilla (NMFS 2013f). In the non-reproductive stages, olive ridleys are migratory and tend to remain in the eastern Pacific pelagic habitats. Distribution is similar to that of the leatherbacks.

In 1978, the Mexican olive ridley turtle nesting population was listed as endangered, while all other populations were listed as threatened. Since the ESA listing, abundance has declined,

particularly in the Pacific. The recovery plan for olive ridley turtles, finalized in 1998, contains more detailed information on the species and is available on the internet (NMFS and USFWS 1998f).

3.1.3 Seabirds

Seabirds are birds whose normal habitat and food source is dependent on the ocean, whether coastal waters, offshore waters, or pelagic waters (Harrison 1983). Birds included in this definition include loons (Gaviiformes), grebes (Podicipediformes), albatrosses, fulmars, prions, petrels, shearwaters, storm-petrels, diving petrels (Procellariiformes), pelicans, boobies, gannets, cormorants, shags, frigatebirds, tropicbirds, anhingas (Pelecaniformes), and shorebirds, skuas, jaegers, gulls, terns, auks, and puffins (Charadriiformes).

Table 3-3 lists the seabirds that are listed under the ESA. The *Environmental Assessment of Proposed Regulations to Govern Interactions between Marine Mammals and Commercial Fishing Operations, under Section 118 of the Marine Mammal Protection Act* (NMFS 1995a) contains much data on seabirds, and is incorporated by reference.

**Table 3-3
U.S. Seabirds of Concern**

Common Name	Scientific Name	Status*
Brown Pelican	<i>Pelecanus occidentalis</i>	E, R**
California Least Tern	<i>Sterna antillarum browni</i>	E
Hawaiian Dark-rumped Petrel	<i>Pterodroma phaeopygia sandwichensis</i>	E
Hawaiian Stilt	<i>Himantopus mexicanus knudseni</i>	E
Least Tern	<i>Sterna antillarum</i>	E
Marbled Murrelet	<i>Brachyramphus marmoratus</i>	T
Newell's Townsend's Shearwater	<i>Puffinus auricularis newelli</i>	T
Roseate Tern	<i>Sterna dougallii dougallii</i>	E, T**
Short-tailed Albatross	<i>Phoebastria albatrus</i>	E

* E = endangered, T = threatened, C = candidate for ESA-listing, R = recovered (delisted)
 ** Status assigned according to population
 Source: USFWS 2013

3.1.4 Anadromous and Marine Fishes

Table 3-4 shows all anadromous and marine fishes that are endangered, threatened, or candidate species for listing under the ESA. There are no catadromous fishes listed or candidates for listing under the ESA.

Recovery plans exist for the shortnose and Gulf sturgeons and are available by request (NMFS 1998b, USFWS and Gulf States Marine Fisheries Commission 1995)

**Table 3-4
Endangered, Threatened, and Candidate Anadromous and Marine Fishes**

Common Name	Scientific Name	Status*
Atlantic Salmon	<i>Salmo salar</i>	E
Atlantic Sturgeon	<i>Acipenser oxyrinchus oxyrinchus</i>	E, T
Barndoor Skate	<i>Raja laevis</i>	C
Bocaccio	<i>Sebastes paucispinis</i>	E**
Canary Rockfish	<i>Sebastes pinniger</i>	T
Chinook Salmon	<i>Oncorhynchus tshawytscha</i>	E, T, C**
Chum Salmon	<i>Oncorhynchus keta</i>	T
Coho Salmon	<i>Oncorhynchus kisutch</i>	T, C**
Cusk	<i>Brosme brosme</i>	C
Dusky Shark	<i>Carcharhinus obscurus</i>	C
Great Hammerhead Shark	<i>Sphyrna mokarran</i>	C
Goliath Grouper	<i>Epinephelus itajara</i>	C
Green Sturgeon	<i>Acipenser medirostris</i>	C
Gulf Sturgeon	<i>Acipenser oxyrinchus desotoi</i>	T
Humphead Wrasse	<i>Cheilinus undulatus</i>	C
Largetooth Sawfish	<i>Pristis perotteti</i>	E
Nassau Grouper	<i>Epinephelus striatus</i>	C
Narrow Sawfish	<i>Anoxypristis cuspidata</i>	P-E
Pacific Eulachon (smelt)	<i>Thaleichthys pacificus</i>	T
Pacific Herring	<i>Clupea pallasii</i>	C
Shortnose Sturgeon	<i>Acipenser brevirostrum</i>	E
Smalltooth Sawfish	<i>Pristis pectinata</i>	E
Sockeye Salmon	<i>Oncorhynchus nerka</i>	E, T, C**
Steelhead Trout	<i>Oncorhynchus mykiss</i>	E, T, C**
Yelloweye Rockfish	<i>Sebastes ruberrimus</i>	T
<small>* E = endangered, T = threatened, C = candidate for ESA-listing, P = proposed ** Status assigned according to population Source: NMFS 2013g, 2013h</small>		

3.2 Description of U.S. Commercial Fisheries

The *Environmental Assessment of Proposed Regulations to Govern Interactions between Marine Mammals and Commercial Fishing Operations, under Section 118 of the Marine Mammal Protection Act* (NMFS 1995a) provides substantial information on U.S. commercial fisheries and their impacts on marine mammals. The 1995 EA describes gillnet, trawl, pair trawl, purse seine, longline, fixed gear (stop net, pound net, trap/pot), and aquaculture fisheries in the East Coast and Gulf of Mexico. The EA describes gillnet, trawl, pair trawl, troll, purse seine/beach seine/throw net, pot/ring net/trap, dip net, pound, bait pen, and aquaculture/ranch pen fisheries in the West Coast and Alaska. From the Hawaii and Western Pacific region, the EA describes troll, longline, and other fisheries. The fisheries descriptions include information on the geographic range, gear type, season, target species, number of permit holders, and regulations for individual or groups of fisheries. The information in that EA is incorporated by reference.

The 2012 SARs (Allen and Angliss 2013, Caretta *et al.* 2013, and Waring *et al.* 2013) and Lists of Fisheries from 1996 through 2013 (NMFS 1995d, 1997, 1998c, 1999, 2000, 2001, 2002, 2003, 2004f, 2006a, 2006b, 2007a, 2007b, 2008a, 2009, 2010a, 2011b, 2013b) include more recent data on U.S. commercial fisheries and are also incorporated by reference.

3.1.1 1996-2013 Lists of Fisheries

Each year during the fishery classification process, NMFS reviews the SARs and performs the tier analysis on commercial fisheries and marine mammal species/stocks. This is the basis for fishery classification changes in a proposed LOF. The 1996 LOF was the first LOF published after the 1994 amendments to the MMPA, which created section 118 and the current fisheries classification scheme. In the 1996 LOF, NMFS classified 188 commercial fisheries according to their level of incidental mortality and serious injury: 6 were classified as Category I (frequent interactions) fisheries, 22 were classified as Category II (occasional interactions) fisheries, and 160 were classified as Category III (remote or no likelihood of interactions) fisheries (NMFS 1995d). Since 1996, NMFS has published thirteen LOFs that included changes in fishery classifications; these changes are summarized in Table 3-5. In 2000 and 2002, NMFS published Notices of Continuing Effect of the List of Fisheries to notify the public that the previous year's LOF remained in effect for the current year (NMFS 2000, 2002).

**Table 3-5
LOF Fishery Classification Changes from 1996-2013**

Year	Fishery Classification Changes
1997	Gulf of Maine mid-Atlantic lobster trap/pot fishery (formed from two Category III fisheries) was elevated from Category III to Category I. California squid purse seine fishery was elevated from Category III to Category II.
1998	None
1999	Gulf of Mexico menhaden purse seine fishery was elevated from Category III to Category II.
2000*	None
2001	Atlantic squid, mackerel, butterfish trawl fishery was elevated from Category II to Category I. Atlantic blue crab trap/pot fishery was elevated from Category III to Category II. North Carolina inshore gillnet fishery was elevated from Category III to Category II. Southeast Atlantic gillnet fishery (formed from two Category III fisheries) was elevated from Category III to Category II.
2002*	None
2003	California/Oregon thresher shark/swordfish drift gillnet fishery was reclassified from Category I to Category II. Alaska Cook Inlet salmon set gillnet fishery was reclassified from Category II to Category III. Gulf of Mexico gillnet fishery was elevated from Category III to Category II. Mid-Atlantic coastal gillnet fishery was elevated from Category II to Category I.
2004	Hawaii swordfish, tuna, billfish, mahi mahi, wahoo, and oceanic sharks longline/set line fishery was elevated from Category III to Category I.
2005	California/Oregon thresher shark/swordfish drift gillnet fishery was elevated from Category II back to its original Category I. AK Bering Sea and Aleutian Islands Greenland turbot longline was elevated from Category III to Category II. AK Bering Sea, Aleutian Islands Pacific cod longline was elevated from Category III to Category II. AK Bering Sea and Aleutian Islands flatfish trawl was elevated from Category III to Category II. AK Bering Sea and Aleutian Islands pollock trawl was elevated from Category III to Category II. AK Bering Sea sablefish pot was elevated from Category III to Category II.

	Northeast bottom trawl was elevated from Category III to Category II. Mid-Atlantic bottom trawl was elevated from Category III to Category II.
2006	AK Bering Sea and Aleutian Islands Greenland turbot longline was reclassified from Category II back to its original Category III. CA sardine purse seine was elevated from Category III to Category II. Chesapeake Bay inshore gillnet was elevated from Category III to Category II. Mid-Atlantic menhaden purse seine was elevated from Category III to Category II.
2007	AK Cook Inlet set gillnet Fishery was elevated from Category III to Category II. Mid-Atlantic mid-Water trawl was reclassified from Category I to Category II.
2008	None
2009	HI shallow-set (swordfish target) longline/set line fishery was reclassified from Category I to Category II. CA halibut/white seabass and other species (>3.5 in. mesh) fishery was reclassified from Category I to Category II. WA/OR/CA sablefish pot fishery was elevated from Category III to Category II. CA spot prawn pot fishery was (split from a larger fishery and) elevated from Category III to Category II. CA Dungeness crab pot fishery was (split from a larger fishery and) elevated from Category III to Category II. OR Dungeness crab pot fishery was (split from a larger fishery and) elevated from Category III to Category II.
2010	American Samoa longline fishery was elevated from Category II to I. AK Southeast purse seine fishery was reclassified from Category II to III. CA pelagic longline fishery was reclassified from Category II to III.
2011	Southeastern U.S. Atlantic, Gulf of Mexico shrimp trawl fishery was elevated from Category III to II. WA Dungeness crab pot/trap fishery was split from the Category III WA Dungeness crab pot fishery and elevated to Category II. CA thresher shark/swordfish drift gillnet fishery was reclassified from Category I to III. CA anchovy, mackerel, sardine purse seine fishery was reclassified from Category II to III. CA squid purse seine fishery was reclassified from Category II to III. CA tuna purse seine fishery was reclassified from Category II to III.
2012	Southeastern U.S. Atlantic, Gulf of Mexico stone crab trap/pot fishery was elevated from Category III to II. CA thresher shark/swordfish drift gillnet fishery was elevated from Category III to II. Pacific highly migratory species drift gillnet high seas fishery was elevated from Category III to II.
2013	CA thresher shark/swordfish drift gillnet fishery was elevated from Category II to I. AK Bering Sea and Aleutian Islands rockfish trawl fishery was elevated from Category III to II. AK Bering Sea and Aleutian Islands Pacific cod longline fishery was reclassified from Category II to III. AK Bering Sea sablefish pot fishery was reclassified from Category II to III.
*NMFS issued a Notice of Continuing Effect in 2000 and 2002. Sources: NMFS 1995d, NMFS 1997, NMFS 1998c, NMFS 1999, NMFS 2000, NMFS 2001, NMFS 2002, NMFS 2003, NMFS 2004f, NMFS 2006a, NMFS 2006b, NMFS 2007a, NMFS 2007b, NMFS 2008a, NMFS 2009, NMFS 2010a, NMFS 2011b, NMFS 2013b	

3.1.2 2014 Proposed LOF

In the 2014 LOF (NMFS 2013j), NMFS has proposed no classification changes. Based on the revised PBR and mortality and serious injury estimates in the draft 2013 and final 2012 SARs, no changes to any fishery's classification are proposed. Several revised estimates of

vessels/persons numbers are proposed, in addition to changes to the list of marine mammal species and stocks incidentally killed or injured. The 2014 proposed LOF is incorporated by reference.

3.3 Take Reduction Teams and Plans

NMFS must develop and implement take reduction plans (Plans) to assist in the recovery or to prevent the depletion of strategic marine mammal stocks that interact with Category I and II fisheries. NMFS must analyze the effects of any regulations proposed and implemented in the plans in a process separate from the actual LOF classification process. When proposing a new plan, NMFS would identify specific impacts through the NEPA process. The potential effects of the plans are too speculative for reasonable consideration and analysis in this EA.

This section describes the teams and plans that have been formed as a result of fishery classification on the LOF. To date, NMFS has established nine take reduction teams, eight of which are still active: Pacific Offshore Cetacean, Harbor Porpoise, Atlantic Large Whale, Bottlenose Dolphin, Atlantic Pelagic Longline, Atlantic Trawl Gear, and False Killer Whale. NMFS has implemented take reduction plans for each TRT except the Atlantic Trawl Gear. The Atlantic Trawl Gear TRT developed a Take Reduction Strategy.

NMFS convened the Atlantic Offshore Cetacean TRT in 1996. It was formed to address take reduction of North Atlantic right whales, humpback whales, sperm whales, beaked whales, pilot whales, common dolphins, bottlenose dolphins, and spotted dolphins in the Atlantic pelagic driftnet, pair trawl, and pelagic longline fisheries. Since the TRT was convened in 1996, the driftnet fishery was closed, the pair trawl fishery remained inactive, and the longline fishery changed substantially to reduce other bycatch. NMFS disbanded the TRT in 2001 due to changes in the fisheries represented on the TRT.

The Atlantic Trawl Gear TRT and Pelagic Longline TRT are part of an April 2003 settlement agreement (*Center for Biological Diversity et al. v. National Marine Fisheries Service*, Case No. C-02-3901-SC (N.D. Cal. 2003)). Additional information on currently operating TRTs follows in the next sections. (NMFS 2013e)

3.3.1 Pacific Offshore Cetacean TRT

The Pacific Offshore Cetacean TRT was formed in 1996 to reduce incidental mortality and serious injury of beaked whales, pilot whales, pygmy sperm whales, sperm whales, and humpback whales in the swordfish/shark drift gillnet fishery off the coasts of California and Oregon. The Plan was implemented on October 30, 1997. The Plan has three main requirements: pingers must be on all nets, nets must be set at a minimum of 36 feet below the water's surface, and vessel operators must attend educational workshops after notification from NMFS. A modification made on January 22, 1999 requires longer attachment lanyards to increase safety of pinger deployment. (NMFS 2013e)

3.3.2 Harbor Porpoise TRT

The Harbor Porpoise TRT is composed of two subgroups: a Gulf of Maine team and a Mid-Atlantic team. The Gulf of Maine Harbor Porpoise TRT first met in February 1996 to address incidental mortality and serious injury of harbor porpoise in the Northeast sink gillnet fishery. The Mid-Atlantic Harbor Porpoise TRT, first convened in February 1997, addressed incidental mortality and serious injury of harbor porpoise in the mid-Atlantic coastal gillnet fishery. In December 1997, based on new bycatch and fishery data, NMFS integrated the Mid-Atlantic Harbor Porpoise TRT report and the Gulf of Maine Harbor Porpoise TRT report, resulting in one Harbor Porpoise Plan for the Atlantic coast. NMFS implemented the Harbor Porpoise Plan on January 1, 1999. The Plan consists of time and area closures unless gear meets certain specifications, some complete time and area closures that apply to any gillnet fishing, and requirements for pingers on sink gillnets in certain times and areas. Modifications were made on January 11, 2001 to exempt Delaware Bay and on February 19, 2010 to expand seasonal and temporal requirements within the management areas. (NMFS 2013e)

3.3.3 Atlantic Large Whale TRT

The Atlantic Large Whale TRT was initially convened in August 1996 to design a Plan to reduce mortality and serious injury of North Atlantic right, humpback, fin, and minke whales in several east coast fisheries, including the Southeastern U.S. shark gillnet fishery, the Northeast/Mid-Atlantic lobster trap/pot fishery, the Mid-Atlantic coastal gillnet fishery, and the Northeast sink gillnet fishery. The Plan became effective in 1997 and has been modified several times since then, most recently in August 2003. The Plan includes gear restrictions, research recommendations, outreach and education recommendations, and a disentanglement program. NMFS has modified the plan to include additional fisheries, gear modifications, and time/area closures. NMFS held public scoping meetings in the summer of 2011 for developing a vertical line rule under the Plan. In July 2013, NMFS proposed to amend the regulations implementing the Atlantic Large Whale Take Reduction Plan to revise the management measures for reducing the incidental mortality and serious injury to the North Atlantic right whale, humpback whale, fin whale, and minke whale in commercial trap/ pot and gillnet fisheries. (NMFS 2013c, 2013d)

3.3.4 Bottlenose Dolphin TRT

The Bottlenose Dolphin TRT was convened in November 2001 to address serious injury and mortality of the Western North Atlantic stock of coastal bottlenose dolphins in the Mid-Atlantic and Southeast gillnet, beach seine, stop net, and trap/pot fisheries. The Plan was finalized on April 26, 2006. The Team met in June 2007 to discuss amendments to the Plan. The team recommended amending the Plan to extend the seasonal night fishing restrictions for medium mesh gillnets in two management areas within North Carolina state waters. A modification was made on December 19, 2008. The team continues to meet, most recently in June 2013, to address ongoing mortality and serious injury in the fisheries covered. (NMFS 2004g, 2013e)

3.3.5 Atlantic Pelagic Longline TRT

The Pelagic Longline TRT was convened in June 2005 to address serious injury and mortality of short-finned and long-finned pilot whales in the mid-Atlantic portion of the Atlantic pelagic longline fishery. The TRT developed a Plan to reduce bycatch to levels approaching a zero mortality and serious injury rate within five years of implementation. The Plan includes a special research area, gear modifications, outreach material, observer coverage, and captain's communications. The Plan was implemented on June 18, 2009. (NMFS 2013e)

3.3.6 False Killer Whale TRT

The False Killer Whale TRT was convened in January 2010 to address the incidental mortality and serious injury of the Hawaii Pelagic, Hawaii Insular, and Palmyra Atoll stocks of false killer whales in the Hawaii-based deep-set and shallow-set longline fisheries. The Plan includes gear restrictions, captain and crew disentanglement training, observer program protocols, and expedited processing of injury determinations and survey data. NMFS implemented the False Killer Whale Plan on December 31, 2012, except for gear requirements which were implemented on February 27, 2013. (NMFS 2013e)

4.0 ENVIRONMENTAL IMPACTS

The environmental impacts of all major Federal actions, including agency rules, must be considered prior to implementation to determine whether they would significantly affect the quality of the human environment. This chapter describes the anticipated direct, indirect, and cumulative environmental impacts of the No Action and action alternatives.

This EA analyzes the process for classifying U.S. commercial fisheries according to the level of serious injury and mortality of marine mammals incidental to each fishery and annual modifications to the LOF. The process of classifying fisheries on the LOF does not directly result in regulatory action. NMFS may use the LOF as a basis for taking additional actions necessary to reduce serious injury and mortality of marine mammals. For example, NMFS must convene a take reduction team and/or develop a take reduction plan for Category I and II fisheries interacting with strategic stocks. However, any regulations proposed and implemented through take reduction planning would first undergo a separate environmental impact analysis under NEPA. NMFS would identify specific impacts through the NEPA process according to the provisions of a take reduction plan that would directly affect protected marine populations and U.S. commercial fisheries.

4.1 Impacts on Protected Marine Populations

This section discusses the potential impacts of the alternatives on protected marine populations: sea turtles, seabirds, fishes, and marine mammals.

4.1.1 Sea Turtles, Seabirds, Salmonids and Other Protected Fishes

Under each alternative (Alternatives 1, 2a, and 2b), classifying commercial fisheries could result in minor, indirect, and positive impacts to sea turtles, seabirds, salmonids and other protected fishes. To meet the long-term goal of reducing incidental mortality and serious injury of strategic marine mammal stocks, a specific Plan may require gear modifications, time/area closures, effort reduction, or some other mechanism that may reduce bycatch of other protected marine species as well. In other words, reducing bycatch of marine mammals may also reduce bycatch of other protected marine species that interact with commercial fisheries.

4.1.2 Marine Mammals

4.1.2.1 Alternative 1: No Action (Preferred Alternative)

The No Action alternative would have direct, positive impacts by indicating the need for reducing incidental mortality and serious injury of marine mammals interacting with commercial fisheries. To meet the MMPA's short- and long-term goals of reducing bycatch of marine mammals in commercial fisheries, NMFS may use the LOF for considering which fisheries to address through the take reduction process.

Because the current scheme for classifying fisheries has already been codified and implemented, the conservation benefits of this alternative would be realized immediately. Also, the current scheme is widely accepted by the scientific community and industry.

4.1.2.2 Alternative 2a

Of all the alternatives, Alternative 2a has the fewest positive impacts on the reduction of incidental mortality and serious injury of marine mammals that interact with commercial fisheries. By setting the threshold between Category II and III at 5% of PBR, fewer fisheries would be classified in Category II than under either of the other action alternatives, which set the threshold between Category II and III at 0.5% (Alternative 2b) and 1% (Alternative 1, no action) of PBR. Fewer fisheries classified in Category II may result in fewer fisheries that are potentially subject to take reduction and monitoring requirements for minimizing bycatch. Since NMFS cannot require observer coverage on Category III vessels, and more fisheries would be classified in Category III under Alternative 2a than any other alternative, this alternative could limit NMFS' ability to collect bycatch data on fisheries that may be causing a substantial amount of marine mammal bycatch, thus potentially compromising the accuracy and precision of NMFS' bycatch estimates.

Alternative 2a protects the fewest marine mammal stocks and as such is inconsistent with the findings and policy of the MMPA. MMPA section 2(6) specifies that marine mammals are of great international significance, esthetic and recreational as well as economic, and should be protected. Further, the MMPA's primary objective of marine mammal management is to maintain the health and stability of the marine ecosystem, while obtaining optimum sustainable

populations. Alternative 2a does not provide enough protection across all marine mammal stocks to achieve this objective.

NMFS reviewed commercial fisheries currently on the LOF with available data (e.g., estimated annual fishery mortality and PBR estimates) to determine whether their current classifications would change based on the threshold between Categories II and III in Alternative 2a. As expected, by raising the current threshold from 1% to 5% of PBR, fewer fisheries warrant a Category II classification. For example, the Alaska Bering Sea and Aleutian Islands pollock trawl fishery, which was reclassified as a Category II fishery in 2005, would be classified in Category III under Alternative 2a. The estimated mean annual fishery mortality of the Western U.S. stock of Steller sea lions in this fishery is 6.16 and PBR is set at 275. Therefore, the fishery's estimated annual mortality is 2.24% of the stock's PBR, which is below the 5% threshold and would thus classify this fishery in Category III under Alternative 2a. Please note that this example only considers one out of ten marine mammal stocks that interact with this fishery; NMFS would not reclassify the fishery unless all stocks interacting with the fishery were below the appropriate threshold. Additionally, while this alternative analyzes the effects of changing the definitions of Categories II and III, NMFS would still retain the ability to categorize fisheries based on other relevant factors in the absence of available data (see Section 1.3 of this EA).

There have been instances in Alaska, for example, where more than ten fisheries have seriously injured or killed at least one Steller sea lion over the period of time considered for a particular fisheries' classification. Therefore, the potential exists for at least that many fisheries to seriously injure or kill at levels of 1% or more of that stock's PBR. If the threshold between Category II and III were 5%, the majority of those fisheries would fall into Category III and future data from those fisheries would not be available through observer programs. The resolution of the total mortality from those fisheries, which could collectively exceed 10% of a stock's PBR (Tier 2, the threshold for assessing individual stocks), would not be adequate. In this instance, the total serious injury and mortality from all Category III fisheries that interact with a stock could exceed the total serious injury and mortality of fisheries that are in Category II, when using a threshold of 5% of a stock's PBR. Therefore, Alternative 2a does not adequately consider the cumulative effects of total serious injury and mortality of any one stock.

4.1.2.3 Alternative 2b

NMFS sampled several commercial fisheries currently on the LOF with available data (e.g., estimated annual fishery mortality and PBR estimates) to determine whether their current classifications would change based on a different threshold between Categories II and III. Lowering the current threshold from 1% to 0.5% of PBR theoretically results in more fisheries classified in Category II. However, using the current available information (e.g., estimated annual fishery mortality and PBR estimates), there are no examples of a fishery that would be classified from Category III to Category II when applying a threshold of 0.5% of PBR. For example, there are limited data regarding mortality estimates in Category III fisheries, as NMFS' ability to observe Category III fisheries is limited. It is important to note that while this alternative analyzes the effects of changing the definitions of Categories II and III, NMFS would still retain the ability to categorize fisheries based on other relevant factors in the absence of available data (see Section 1.3 of this EA). Providing observer coverage to achieve the accuracy

and precision that this analysis requires would be very difficult, if not impossible, for some programs to achieve without a very large increase in program resources.

Of all the alternatives, Alternative 2b would seem to have the greatest potential positive impacts on the reduction of incidental mortality and serious injury of marine mammals that interact with commercial fisheries. By setting the threshold between Category II and III at 0.5% of PBR, more fisheries would be classified in Category II than under either of the other action alternatives, which set the threshold between Category II and III at 5% (Alternative 2a) and 1% (Alternative 1, no action) of PBR. More fisheries classified in Category II would result in more fisheries that are subject to take reduction requirements for minimizing bycatch. Therefore, Alternative 2b potentially protects the greatest number of marine mammal stocks.

With potentially more fisheries classified in Category II under this conservative approach, NMFS would require additional resources to reduce bycatch to appropriate levels in a greater number of fisheries. However, when resources are limited, NMFS can exercise discretion regarding which TRTs to convene (see Section 1.3.1.4 of this EA). Therefore, regardless of the number of fisheries in Category II, NMFS is limited with respect to how many fisheries could actually be addressed through take reduction planning. Thus, in terms of conservation impacts, Alternative 2b does not differ from the No Action alternative.

4.2 Impacts on U.S. Commercial Fisheries

This section analyzes the impacts of the action alternatives on active U.S. commercial fisheries.

Some marine mammal stocks do not have available abundance estimates, PBR levels, or annual fishery mortality estimates. This lack of information largely prevents NMFS from analyzing how each individual fishery's classification may change as a result of any alternative. For example, if a fishery interacts with several marine mammal stocks, but PBR and annual fishery mortality estimates are unknown for even one of those stocks, NMFS would not reclassify that fishery unless all stocks interacting with the fishery were below the appropriate thresholds. In these cases where data to determine the frequency of marine mammal bycatch in a particular fishery is unavailable, NMFS may classify commercial fisheries based on other factors including fishing techniques, gear type, marine mammal deterrence methods, target species, seasons and areas fished, qualitative data from logbooks and fisher reports, stranding data, and marine mammal species and distributions.

Under each alternative, all U.S. commercial fishers participating in a Category I, II, or III fishery must report all incidental injuries or mortalities of marine mammals that occur during commercial fishing operations to NMFS within 48 hours of the end of each fishing trip.

Under each alternative, existing TRTs would continue meeting and working through the take reduction process.

4.2.1 Alternative 1: No Action (Preferred)

Under the No Action alternative, the fishery classification scheme would not change, and there would be no new impacts on the process to produce the annual LOF. In addition to the reporting requirement, as stated above and in section 1.3.1 of this EA, U.S. commercial fisheries classified in Category I or II are subject to three requirements: 1) registration, 2) monitoring, and 3) take reduction planning.

The No Action alternative would result in minor, direct, socioeconomic impacts on U.S. commercial fisheries. In the event that a Category III fishery is reclassified as a Category I or II fishery, direct impacts in the form of registration fees could affect fishers if that fishery does not have an integrated registration program (see section 1.3.1.1 of this EA). MMPA registration for Category I and II fisheries has been integrated with existing State and Federal fishing license, registration, or permit systems and no fishermen pay an additional registration fee. Individuals fishing in a fishery for which no State or Federal permit is required must register with NMFS.

As mentioned above, NMFS may use the LOF as a basis for taking additional actions necessary to reduce serious injury and mortality of marine mammals. Specifically, NMFS may convene a take reduction team and/or develop a take reduction plan for Category I and II fisheries interacting with strategic stocks. Therefore, Category III fisheries reclassified as Category I or II are subject to the take reduction process. If NMFS convenes a TRT for any reclassified fishery in the future, there would be direct and indirect, minor, negative socioeconomic impacts on fishers serving on the TRT. The indirect socioeconomic impacts relate to opportunity costs. Opportunity costs to TRT participants directly correlate with the length of the TRT process. Generally, the opportunity costs are lost fishing time and potential income during TRT meetings. Because the MMPA specifies that TRT members serve without compensation, there is no financial support to offset these opportunity costs.

In the future, the opportunity costs to all commercial fishers would result from potential Plan measures, such as time and area closures, that may reduce fishing effort. Direct costs to fishers would be based on potential Plan measures. In addition to time and area restrictions, such measures could include gear modification or replacement, which would likely result in direct costs as fishers alter existing gear or purchase new types of gear. NMFS would analyze the effects of any regulations proposed and implemented through such take reduction planning in a process separate from the actual LOF classification process. NMFS would identify specific impacts through the NEPA process according to the provisions of a Plan that would directly affect U.S. commercial fisheries. Under the No Action alternative, all existing TRTs would continue meeting and working through the take reduction process.

There are no immediate impacts, positive or negative, for fisheries whose classification changes between Categories I and II. As mentioned earlier in this EA, in the absence of sufficient funding to develop and implement Plans for all strategic stocks interacting with Category I and II fisheries, NMFS may use the LOF for prioritizing development of future TRTs/Plans. NMFS would consider the extent (i.e., number of stocks, level of serious injury and mortality) of interactions between marine mammals and commercial fisheries while determining which TRTs/Plans to convene.

4.2.2 Alternative 2a

Alternative 2a would change the fishery classification scheme such that the threshold between Category II and III would be raised from 1% to 5% of PBR. Alternative 2a would require NMFS to change its implementing regulations for classifying U.S. commercial fisheries on the LOF by modifying the definitions of Category II and III fisheries from the current definitions found in 50 CFR 229.2 and described in section 1.3 of this EA. Promulgating new regulations generally takes longer than one year. Therefore, if NMFS were to initiate this process immediately (i.e., before finalizing the 2014 LOF), Alternative 2a would negatively impact the process to produce the annual LOF. However, if NMFS were to modify the scheme for future LOFs (i.e., after finalizing the 2014 LOF), the process for classifying fisheries would remain the same except that NMFS would use a 5% threshold between Category II and III.

As the least conservative alternative, Alternative 2a would result in the fewest number of fisheries classified in Category II. Therefore, Alternative 2a would produce the fewest fisheries required to reduce serious injury and mortality of marine mammals. All requirements for Category I and II fisheries (reporting, monitoring, take reduction planning) would remain the same as the No Action Alternative (preferred).

Because Alternative 2a would likely result in fewer fisheries being classified in Category II, this alternative would have the fewest potential, direct and indirect, negative socioeconomic impacts on commercial fishers participating on TRTs. The indirect socioeconomic impacts relate to opportunity costs. Opportunity costs to the TRT participants directly correlate with the length of the TRT process. Generally, the opportunity costs are lost fishing time and potential income during TRT meetings. Because the MMPA specifies that TRT members serve without compensation, there is no financial support to offset these opportunity costs. The opportunity costs to all commercial fishers would result from potential Plan measures, such as time and area closures, that may reduce fishing effort. Under Alternative 2a, opportunity costs would be small because fewer fisheries would be subject to the take reduction process than under any other alternative. Direct costs to fishers would be based on future Plan measures. In addition to time and area restrictions as mentioned above, such measures could include gear modification or replacement, which would likely result in direct costs as fishers alter existing gear or purchase new types of gear.

Alternative 2a is likely to have fewer negative socioeconomic impacts on all fishery participants than the other alternatives. However, such results may cause less reduction in incidental mortality and serious injury of marine mammals, which would be a negative ecological impact.

4.2.3 Alternative 2b

Under the Alternative 2b, the fishery classification scheme would change in that the threshold between Category II and III would be lowered from 1% to 0.5% of PBR. Alternative 2b would require NMFS to change its implementing regulations for classifying U.S. commercial fisheries on the LOF by modifying the definitions of Category II and III fisheries from the current definitions found in 50 CFR 229.2 and described in section 1.3 of this EA. Promulgating new regulations generally takes longer than one year. Therefore, if NMFS were to initiate this

process immediately (i.e., before finalizing the 2014 LOF), Alternative 2b would negatively impact the process to produce the annual LOF. However, if NMFS were to modify the scheme for future LOFs (i.e., after finalizing the 2014 LOF), the process for classifying fisheries would remain the same except that NMFS would use a 0.5% threshold between Category II and III.

As the most conservative alternative, Alternative 2b would potentially result in the greatest number of fisheries classified in Category II. Therefore, Alternative 2b would result in the greatest number of fisheries required to reduce serious injury and mortality of marine mammals. All requirements for Category I and II fisheries (reporting, monitoring, take reduction planning) would remain the same as the No Action Alternative (preferred).

Because Alternative 2b would likely result in the greatest number of fisheries being classified in Category II, it would have the greatest potential, direct and indirect, negative socioeconomic impacts on commercial fishers serving on TRTs. The indirect socioeconomic impacts relate to opportunity costs. Opportunity costs to the TRT participants directly correlate with the length of the TRT process. Generally, the opportunity costs are lost fishing time and potential income during TRT meetings. Because the MMPA specifies that TRT members serve without compensation, there is no financial support to offset these opportunity costs. The opportunity costs to all commercial fishers would result from potential Plan measures, such as time and area closures, that may reduce fishing effort. Under Alternative 2b, opportunity costs would be greatest because more fisheries would be subject to the take reduction process than under any other alternative.

The costs to all fishers would result from future Plan measures, such as time and area restrictions, gear modification or replacement, which would reduce fishing effort and likely result in direct costs. Such direct costs could include costs to alter existing gear, purchase new types of gear, or fuel to get to new fishing areas. Alternative 2b would impose more potential costs on TRT participants than any other alternative because a greater number of fisheries would be subject to the take reduction process. Thus, Alternative 2b is the most biologically conservative alternative because it would result in the greatest reduction of marine mammal bycatch.

4.3 Regulatory Impacts

This section discusses the regulatory impacts of implementing each alternative with regard to applicable laws, namely the MMPA, ESA, CZMA, MSA, and E.O. 12866. Only the MMPA and the Magnuson-Stevens Act are discussed individually under each alternative.

None of the alternatives are likely to adversely affect ESA-listed species or their critical habitat. ESA-listed species are discussed above in section 4.1. Therefore, no formal section 7 consultation is necessary under any of the alternatives.

4.3.1 Alternative 1: No Action (Preferred)

4.3.1.1 MMPA

Implementing the No Action Alternative would be consistent with the requirements of MMPA section 118 for classifying commercial fisheries and publishing an LOF. Also, Alternative 1 would be consistent with all other sections of the MMPA.

4.3.1.2 MSA

Alternative 1 would have a minor, positive effect on bycatch reduction of species under the jurisdiction of the Magnuson-Stevens Act. Alternative 1 would require NMFS to classify fisheries according to their level of incidental serious injury and mortality of marine mammals as currently described in 50 CFR 229.8. Also, an indirect, positive effect would occur relative to bycatch of species under jurisdiction of the Magnuson-Stevens Act. Bycatch of these species may be further reduced as a result of any future Plan regulations for Category I or II fisheries. It is likely that TRTs would propose gear modifications or other restrictions that would reduce bycatch of other non-target species as a positive side effect of reducing serious injury and mortality of marine mammals.

The No Action Alternative would not affect EFH, and therefore, no formal consultation with the NMFS Office of Habitat Conservation is required. However, it is possible that future Plan provisions would consider possible impacts on EFH. For example, if a take reduction measure shifts fishing effort to a new location that has otherwise been unaffected by fishing operations, such new fishing effort should be analyzed to determine if EFH would be affected. Similarly, future Plan provisions could benefit EFH by, for example, restricting certain types of fishing gear in areas with EFH. If appropriate, NEPA analysis and coordination with the NMFS Office of Habitat Conservation would be conducted for new Plan provisions.

4.3.2 Alternative 2a

4.3.2.1 MMPA

Implementing Alternative 2a after finalizing the 2014 LOF would be consistent with the requirements of MMPA section 118 for classifying commercial fisheries and publishing an LOF. However, implementing Alternative 2a before finalizing the 2014 LOF would be inconsistent with the MMPA. Implementing Alternative 2a requires NMFS to change the implementing regulations for classifying fisheries on the LOF. The rulemaking process generally takes longer than one year. If NMFS were to undertake rulemaking to change the current fisheries classification scheme, NMFS would fail to meet the requirements for publishing an LOF this year as detailed in MMPA section 118(c)(1)(C). Also, Alternative 2a would be consistent with all other sections of the MMPA.

4.3.2.2 MSA

Compared to the other action alternatives, the minor positive effects on bycatch reduction would be fewest under Alternative 2a because it is the least protective alternative. An indirect, positive effect would occur relative to bycatch of species under jurisdiction of the Magnuson-Stevens Act. Bycatch of these species may be further reduced as a result of any future Plan regulations for Category I or II fisheries. It is likely that TRTs would propose gear modifications or other restrictions that would reduce bycatch of other non-target species as a positive side effect of reducing serious injury and mortality of marine mammals. This indirect, positive effect would be least under Alternative 2a because fewer fisheries would be classified in Category II, and thus, fewer fisheries would be subject to the take reduction process.

Alternative 2a would not affect EFH, and therefore, no formal consultation with the NMFS Office of Habitat Conservation is required. However, it is possible that future Plan provisions would consider possible impacts on EFH. For example, if a take reduction measure shifts fishing effort to a new location that has otherwise been unaffected by fishing operations, such new fishing effort should be analyzed to determine if EFH would be affected. Similarly, future Plan provisions could benefit EFH by, for example, restricting certain types of fishing gear in areas with EFH. If appropriate, NEPA analysis and coordination with the NMFS Office of Habitat Conservation would be conducted for new Plan provisions.

4.3.3 Alternative 2b

4.3.3.1 MMPA

Implementing Alternative 2b after finalizing the 2014 LOF would be consistent with the requirements of MMPA section 118 for classifying commercial fisheries and publishing an LOF. However, implementing Alternative 2b before finalizing the 2014 LOF would be inconsistent with the MMPA. Implementing Alternative 2b requires NMFS to change the implementing regulations for classifying fisheries on the LOF. The rulemaking process generally takes longer than one year. If NMFS were to undertake rulemaking to change the current fisheries classification scheme, NMFS would fail to meet the requirements for publishing an LOF this year as detailed in MMPA section 118(c)(1)(C). Also, Alternative 2b would be consistent with all other sections of the MMPA.

4.3.3.2 MSA

Compared to the other action alternatives, the minor positive effects on bycatch reduction would be greatest under Alternative 2b because it is the most protective alternative. An indirect, positive effect would occur relative to bycatch of species under jurisdiction of the Magnuson-Stevens Act. Bycatch of these species may be further reduced as a result of any future Plan regulations for Category I or II fisheries. It is likely that TRTs would propose gear modifications or other restrictions that would reduce bycatch of other non-target species as a positive side effect of reducing serious injury and mortality of marine mammals. This indirect, positive effect would be greatest under Alternative 2b because a greater number of fisheries would be classified

in Category II, and thus, a greater number of fisheries would be subject to the take reduction process.

Alternative 2b would not affect EFH, and therefore, no formal consultation with the NMFS Office of Habitat Conservation is required. However, it is possible that future Plan provisions would consider possible impacts on EFH. For example, if a take reduction measure shifts fishing effort to a new location that has otherwise been unaffected by fishing operations, such new fishing effort should be analyzed to determine if EFH would be affected. Similarly, future Plan provisions could benefit EFH by, for example, restricting certain types of fishing gear in areas with EFH. If appropriate, NEPA analysis and coordination with the NMFS Office of Habitat Conservation would be conducted for new Plan provisions.

4.4 Cumulative Impacts

Generally, the cumulative impacts would be the same for each of the action alternatives. Regulations to reduce serious injury or mortality of marine mammals are not developed pursuant to the LOF, rather specific Plans and implementing regulations are developed to directly reduce marine mammal bycatch. Therefore, specific impacts on protected marine populations and on U.S. commercial fisheries will be analyzed in future NEPA documents on a particular Plan. Under all alternatives, the available financial resources impacts the number of TRTs that NMFS can convene. The impacts of classifying commercial fisheries in the LOF would not directly affect other fishery regulatory programs. All fishery regulatory programs concerning marine mammals are dedicated to protecting and conserving marine mammals. All alternatives in this EA would likely contribute positively to most of these programs by classifying fisheries, which allows NMFS to prioritize efforts (e.g., observer coverage, take reduction planning) for reducing marine mammal bycatch in commercial fisheries.

The only minor, negative cumulative effects on regulatory procedures would apply to Alternatives 2a and 2b regarding fishery categories. Under Alternatives 2a and 2b, NMFS would be required to change its implementing regulations – to change the definitions of Categories II and III – for classifying U.S. commercial fisheries on the LOF. Promulgating new regulations would require NMFS to change the definitions of Categories II and III from the current definitions found in 50 CFR 229.2 and described in section 1.3 of this EA. Such a process would have minor, negative effects on NMFS as it would require time to implement a new classification scheme, which is used in the annual LOF and SARs. However, the preferred alternative, Alternative 1, would not require a new fishery classification scheme.

The socioeconomic effects on commercial fisheries are not quantifiable at this stage; future NEPA documents for specific Plans would address specific socioeconomic impacts resulting from those Plans. When considered in combination with other fishery regulations already in place, additive effects of the preferred alternative on socioeconomics of the commercial fishing industry are expected to be minor. Such minor, negative effects may include slight increases in costs to fishermen to abide by Plan measures to reduce bycatch of marine mammals. Minor, positive effects may include increased landings of the target species if future required measures to reduce bycatch are enough to increase landings per trip of the target catch.

The action alternatives may have minor, indirect effects on other industries associated with commercial fishing. Such industries include gear manufacturing and the seafood industry. Effects on gear manufacturers would correlate to any gear modifications included under Plans. Gear modifications could result in substantial, short-term, positive effects on gear manufacturers if a new type of gear is developed and required under Plans. Minor, long-term, positive impacts may result if Plan measures include any language to replace or mend gear in regular time cycles. Fishermen who do not make their own gear would rely on gear manufacturers and contribute financially to that industry, thus boosting its economy.

The seafood industry includes seafood processors, restaurants, and markets. Ultimately, the seafood consumer may be affected as well. If the costs to fishermen increase as a result of Plan requirements (e.g., gear modification/replacement or time/area closures) to reduce bycatch below a stock's PBR level, the cost of fish may increase throughout the seafood industry. The degree of such economic ripple effects would depend on specific Plan measures.

Finally, implementation of the No Action Alternative (Preferred) or Alternative 2b may, in the long-term, result in less marine mammal bycatch nationwide, which is a moderate, positive, long-term impact. This may allow NMFS to focus more regulatory effort on methods to reduce other human-caused mortality and serious injury, such as vessel strikes and marine pollution.

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