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50 CFR Part 218

Taking and Importing Marine Mammals: Taking Marine Mammals Incidental to U.S. Navy Operations of Surveillance Towed Array Sensor System Low Frequency Active Sonar; Final Rule

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 218

[Docket No. 110808485–2148–02]

RIN 0648–BB14

Taking and Importing Marine Mammals: Taking Marine Mammals Incidental to U.S. Navy Operations of Surveillance Towed Array Sensor System Low Frequency Active Sonar

AGENCY: National Marine Fisheries Service, National Oceanic and Atmospheric Administration, Commerce.

ACTION: Final rule.

SUMMARY: Upon application from the U.S. Navy (Navy), we (the National Marine Fisheries Service) are issuing regulations under the Marine Mammal Protection Act to govern the unintentional taking of marine mammals incidental to conducting operations of Surveillance Towed Array Sensor System (SURTASS) Low Frequency Active (LFA) sonar on a maximum of four naval surveillance vessels in areas of the Pacific, Atlantic, and Indian Oceans and the Mediterranean Sea, from the period of August 15, 2012, through August 15, 2017. These regulations: allow us to issue Letters of Authorization (LOA) for the incidental take of marine mammals during the Navy's specified activities and timeframes; set forth the permissible methods of taking; set forth other means of effecting the least practicable adverse impact on marine mammal species and their habitat; and set forth requirements pertaining to the monitoring and reporting of the incidental take.

DATES: Effective August 15, 2012, through August 15, 2017.

ADDRESSES: To obtain an electronic copy of: the Navy's application (which contains a list of the references within this document); our Record of Decision; and other documents that we have cited in this document, write to P. Michael Payne, Chief, Permits and Conservation Division, Office of Protected Resources, National Marine Fisheries Service, 1315 East-West Highway, Silver Spring, MD 20910–3225, or download electronic copies at: *http://www.nmfs.noaa.gov/pr/permits/incidental.htm#applications* or telephone the contact listed here (see **FOR FURTHER INFORMATION CONTACT**).

The Navy released a Final Supplemental Environmental Impact Statement/Supplemental Overseas Environmental Impact Statement (FSEIS/SOEIS) for employment of SURTASS LFA sonar on June 8, 2012. The public may view the document at: *http://www.surtass-lfa-eis.com.* We participated in the development of this document as a cooperating agency under the Council on Environmental Quality's regulations implementing the National Environmental Policy Act of 1972.

FOR FURTHER INFORMATION CONTACT: Jeannine Cody, Office of Protected Resources, NMFS, (301) 427–8401.

SUPPLEMENTARY INFORMATION:

Executive Summary

This regulation allows us to issue Letters of Authorization to the Navy (upon their request) for the incidental take of marine mammals during SURTASS LFA sonar operations. The SURTASS LFA sonar system is a long-range, low frequency sonar that has both active and passive acoustic components. The Navy will use the system for long-range detection of quiet, hard-to-find submarines. The Navy's activities are military readiness activities under the Marine Mammal Protection Act of 1972, as amended (MMPA; 16 U.S.C. 1631 *et seq.*) as defined by the National Defense Authorization Act for Fiscal Year 2004 (NDAA; Pub. L. 108–136).

This is the third rule for SURTASS LFA sonar operations under the Marine Mammal Protection Act. The 2007 regulations governing take incidental to SURTASS LFA sonar activities expire on August 15, 2012. We published the first rule, effective from August 2002 through August 2007, on July 16, 2002 (67 FR 46712), and published the second rule on August 21, 2007 (72 FR 46846). For this five-year period (August 2012 through August 2017), covered under this regulation, the Navy is proposing to conduct the same types of sonar activities as they have conducted over the past nine years.

Purpose and Need for This Regulatory Action

In 2011, we received an application from the Navy requesting five-year regulations and Letters of Authorizations to take marine mammals, by harassment, incidental to conducting SURTASS LFA sonar operations in areas of the world's oceans from August 2012 through August 2017. These operations, which constitute a military readiness activity, have the potential to cause behavioral disturbance and injury (if not mitigated) to marine mammals.

Section 101(a)(5)(A) of the MMPA directs the Secretary of Commerce (Secretary) to authorize, upon request, the incidental, but not intentional, taking of marine mammals of a species or population stock, by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region if after notice and public comment: (1) We make certain findings; and (2) issue regulations.

Under this five-year regulation, the Navy will submit an annual application to us for Letters of Authorizations for up to four vessels to take marine mammals, incidental to conducting SURTASS LFA sonar operations.

This regulation establishes a framework to authorize incidental take through our issuing Letters of Authorizations to the Navy for SURTASS LFA sonar operations and contains mitigation, monitoring, and reporting requirements.

Legal Authority for the Regulatory Action

Section 101(a)(5)(A) of the Marine Mammal Protection Act and our implementing regulations at 50 CFR part 216, subpart I provide the legal basis for issuing the five-year regulations and Letters of Authorization.

Summary of Major Provisions Within the Regulation

The following provides a summary of some of the major provisions within this third rulemaking for SURTASS LFA sonar:

- Required suspension/delay of SURTASS LFA sonar transmissions if a marine mammal enters the 2-kilometer (km) (1.2-mile (mi); 1.1 nautical mile (nm)) mitigation and buffer zones around the vessel;
- Required geographic restrictions in designated offshore biologically important areas (OBIA) and within 22 km (14 mi; 12 nm) of any coastline, including islands, for SURTASS LFA sonar operations to protect marine mammals;
- Required visual, passive acoustic and active acoustic monitoring during routine training, testing and military operations of SURTASS LFA sonar to support the implementation of mitigation measures to protect marine mammals;
- Required monitoring of ambient noise data for incorporation into appropriate ocean noise budget efforts and analyses;
- Required monitoring of marine mammal stranding incidents; and
- Required research on how marine mammals (including harbor porpoises (*Phocoena phocoena*) and beaked whales (*Mesoplodon spp.*)) respond to

SURTASS LFA sonar as well as research on marine mammal vocalizations before, during, and after designated exercises with SURTASS LFA sonar.

Cost and Benefits

This final rule, specific only to the Navy's SURTASS LFA sonar operations, is not significant under Executive Order 12866, Regulatory Planning and Review.

Availability of Supporting Information

We provided extensive **SUPPLEMENTARY INFORMATION** in the Notice of the proposed rule for this activity in the **Federal Register** on Friday, January 6, 2012 (77 FR 842). We did not reprint all of that information here in its entirety; instead, we represent all sections from the proposed rule in this document and provide either a summary of the material presented in the proposed rule or a note referencing the page(s) in the proposed rule where the public can find the information. We address any information that has changed since the proposed rule in this document. Additionally, this final rule contains a section that responds to the public comments submitted during the 30-day public comment period and the 15-day extension of the comment period for the proposed rule.

Background

Section 101(a)(5)(A) of the MMPA directs the Secretary to authorize, upon request, the incidental, but not intentional, taking of small numbers of marine mammals of a species or population stock, by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region if, after notice and public comment: (1) We make certain findings; and (2) we issue regulations. We are required to grant authorization for the incidental taking of marine mammals if we find that the total taking will have a negligible impact on the species or stock(s); and will not have an unmitigable adverse impact on the availability of the species or stock(s) for subsistence uses (where relevant). We must also set forth the permissible methods of taking; other means of effecting the least practicable adverse impact on the species or stock and its habitat; and requirements pertaining to the mitigation, monitoring, and reporting of the takings.

Accordingly, this regulation, which governs our issuance of Letters of Authorization (LOA) to the Navy, designates: (1) The permissible methods of taking; (2) mitigation measures to minimize adverse impacts to the lowest level practicable on marine mammal species and their habitat; and (3) requirements for monitoring and reporting incidental take.

We have defined negligible impact in 50 CFR 216.103 as ''* * * an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival.''

The National Defense Authorization Act of 2004 amended section 101(a)(5)(A) of the MMPA by removing the small numbers and specified geographic region provisions; revising the definition of harassment as it applies to a military readiness activity; and explicitly requiring that our determination of ''least practicable adverse impact'' include consideration of: (1) Personnel safety; (2) the practicality of implementation; and (3) impact on the effectiveness of the military readiness activity.

With respect to military readiness activities, the MMPA defines harassment as ''(i) any act that injures or has the significant potential to injure a marine mammal or marine mammal stock in the wild [Level A harassment]; or (ii) any act that disturbs or is likely to disturb a marine mammal or marine mammal stock in the wild by causing disruption of natural behavioral patterns, including, but not limited to, migration, surfacing, nursing, breeding, feeding, or sheltering, to a point where such behavioral patterns are abandoned or significantly altered [Level B harassment].''

Summary of Request

On August 17, 2011, we received an application from the Navy requesting rulemaking and LOAs for the take of individuals of 94 species of marine mammals (70 cetaceans and 24 pinnipeds), by Level A and Level B harassment, incidental to upcoming routine training and testing and use of the SURTASS LFA sonar system during military operations in areas of the Pacific, Atlantic, and Indian Oceans and the Mediterranean Sea over the course of five years (2012–2017). The Navy would use the sonar system on a maximum of four naval surveillance vessels during military operations which they have designated as military readiness activities.

The Navy states and we concur, that these military readiness activities may incidentally take marine mammals present within the Navy's mission areas by exposing them to sound from low-frequency active sonar sources. The Navy requests authorization to take individuals of these marine mammals by Level A and Level B harassment. However, as we discuss later in this document, the Navy will likely avoid Level A harassment by implementing required mitigation and monitoring measures.

Please refer to Tables 9–27 (pages 123–140) of the Navy's application for detailed information on the estimated percentages of marine mammal stocks potentially affected by SURTASS LFA sonar activities in areas of the Pacific, Atlantic, and Indian Oceans and the Mediterranean Sea per year. This final rule does not specify the number of marine mammals that may be taken in the proposed locations because the Navy calculates the take estimates annually through various inputs such as mission location, mission duration, and season of operation.

As with the 2002 and 2007 rules, the Navy will limit operation of SURTASS LFA sonar to ensure that no more than 12 percent of any marine mammal stock would be taken by Level B harassment, annually, over the course of this rule. This annual, per-stock cap applies regardless of the number of SURTASS LFA sonar vessels operating. The Navy will use the 12 percent cap to guide its mission planning for selecting potential operational areas within each annual authorization application.

As a result of the required mitigation and monitoring measures and standard operating procedures and the Navy's mission planning which, to the greatest extent feasible considering national security tasking, avoids conducting SURTASS LFA sonar operations in areas of high marine animal densities, we believe that the incidental take of marine mammals would likely be lower than the Navy's requested amount of incidental take.

In the Navy's application, their acoustic analyses predict that less than 0.0001 percent of the endangered north Pacific right whale (*Eubalaena japonica*) population; less than 0.0001 of the northern elephant seal (*Mirounga angustirostris*) population; and 0.00 percent of the stocks of all other marine mammal species may be exposed to levels of sound likely to result in Level A harassment. Quantitatively, the Navy's request translates into take estimates of zero animals for any species, including north Pacific right whales. However, because the probability of detection by the Navy's active High-Frequency Marine Mammal Monitoring (HF/M3) sonar system within the SURTASS LFA sonar mitigation and buffer zones is not 100 percent, we will include a small number of Level A harassment takes for marine mammals over the course of the five-year regulations based on qualitative

analyses. These are the only quantitative adjustments that we have made to the Navy's requested takes from their modeled exposure results.

Because the required mitigation measures will minimize any potential risk for mortality and SURTASS LFA sonar has operated under previous regulations for the last ten years without any reports of mortality, we do not expect any mortality to occur as a result of the Navy's SURTASS LFA sonar operations. Thus, we are not authorizing any mortality incidental to the Navy's routine training and testing and military operations of the SURTASS LFA sonar system.

Description of Specified Activities

The proposed rule included a complete description of the Navy's specified activities covered by these final regulations (for which we would authorize the associated incidental take of marine mammals in annual LOAs and described the nature and levels of the use of the SURTASS LFA sonar system (77 FR 842; January 6, 2012; page 843–846). These military readiness activities for SURTASS LFA sonar consist of routine training and testing as well as use of the system during military operations which involves acoustic sources, including low frequency active sonar and high-frequency active sonar components. Below we summarize the description of the specified activities and one small correction from the proposed rule.

Potential SURTASS LFA Sonar Operational Areas

Based on the Navy's current operational requirements, potential operations for SURTASS LFA sonar vessels from August 2012 through August 2017 would include areas located in the Pacific, Indian, and Atlantic Oceans and Mediterranean Sea. The proposed rule provided a list of the Navy's potential operating areas in Table 2 relevant to U.S. national security interests (77 FR 842; January 6, 2012; page 843–844). Use of the SURTASS LFA sonar system could occur on a maximum of four naval surveillance vessels: the United States Naval Ship (USNS) ABLE, the USNS EFFECTIVE, the USNS IMPECCABLE, and the USNS VICTORIOUS.

The Navy will not operate SURTASS LFA sonar in polar regions (i.e., Arctic and Antarctic waters) of the world. The Arctic Ocean, the Bering Sea (including Bristol Bay and Norton Sound), portions of the Norwegian, Greenland, and Barents Seas north of 72° North (N) latitude, plus Baffin Bay, Hudson Bay, and the Gulf of St. Lawrence are non-operational areas for SURTASS LFA sonar. In the Antarctic, the Navy will not conduct SURTASS LFA sonar operations in areas south of 60° South (S) latitude. The Navy has excluded polar waters from operational planning because of the inherent inclement weather conditions and the navigational and operational (equipment) danger that icebergs pose to SURTASS LFA sonar vessels. Further, the Navy would operate SURTASS LFA sonar such that the sound field does not exceed 180 decibels (dB) re: 1 μPa within the coastal standoff zone (i.e., 22 km; 14mi; 12 nm from any coastline) or seaward of any OBIA boundary for SURTASS LFA sonar operations, identified later in this document.

We have included additional operational restrictions beyond what the Navy proposed in their application for SURTASS LFA sonar operations within this rule. We are requiring: (1) An additional 1-km (0.62 mi; 054 nm) buffer around the Navy's 1-km (0.62 mi; 054 nm) LFA sonar mitigation zone to protect marine mammals from entering the 180-dBisopleth around the SURTASS LFA sonar vessel; and (2) an additional 1-km (0.62 mi; 054 nm) buffer seaward of the outer perimeter of any OBIA.

Table 1 summarizes a projected annual deployment schedule for one surveillance vessel using SURTASS LFA sonar.

TABLE 1—EXAMPLE ANNUAL DEPLOYMENT SCHEDULE FOR ONE SURVEILLANCE VESSEL USING SURTASS LFA SONAR

On mission	Days	Off mission	Days
Transit	54	In-Port Upkeep	40
Active Transmissions.			
432 transmission hours based on a 7.5% duty cycle.	240	Regular Overhaul	31
Total Days on Mission	294	Total Days off Mission	71.

In the proposed rule, we incorrectly stated that a normal SURTASS LFA sonar deployment schedule for a single vessel would involve 240 days of active sonar transmissions (77 FR 842; January 6, 2012; page 843). The correct statement is that the each vessel will perform up to 240 days of active operations and transmit SURTASS LFA sonar up to 432 hours.

Brief Background on Sound, Marine Mammal Hearing, and Vocalization

An understanding of the basic properties of underwater sound, marine mammal hearing, and vocalization is necessary to comprehend many of the concepts and analyses presented in this document. The proposed rule contains a section that provides a brief background on the principles of sound that are frequently referred to in this rulemaking (77 FR 842; January 6, 2012; pages 857–859). This section also includes a discussion of the functional hearing ranges of the different groups of marine mammals (by frequency) as well as a discussion of the sound metric used in our analysis (sound pressure level and single ping equivalent). The information contained in the proposed rule has not changed.

Acoustic stimuli (i.e., increased underwater sound) generated by the SURTASS LFA sonar system's low-frequency acoustic transmissions have the potential to cause take of marine mammals in the operational areas. The operation of the SURTASS LFA sonar system during at-sea operations would result in the generation of sound or pressure waves in the water at or above levels that we have determined would result in take. This is the principal means of marine mammal taking associated with these military readiness activities. At no point do we expect the Navy to have more than four SURTASS LFA sonar systems in use, and so this rule analyzes the effects on marine mammals due to the deployment of up to four SURTASS LFA sonar systems from 2012 through 2017.

Description of Marine Mammals in the Area of the Specified Activities

Ninety-four (94) marine mammal species or populations/stocks have confirmed or possible occurrence within potential SURTASS LFA sonar operational areas in the Pacific, Atlantic, and Indian Oceans and the Mediterranean Sea. Twelve species of

baleen whales (mysticetes), 58 species of toothed whales, dolphins, or porpoises (odontocetes), and 24 species of seals or sea lions (pinnipeds) could be affected by SURTASS LFA sonar operations.

Fifteen of the 94 marine mammal species are endangered and three of the 94 marine mammal species are threatened under the Endangered Species Act of 1973 (ESA; 16 U.S.C. 1531 *et seq.*). Marine mammal species under our jurisdiction that are endangered include: the blue whale (*Balaenoptera musculus*); fin whale (*Balaenoptera physalus*); sei whale (*Balaenoptera borealis*); humpback whale (*Megaptera novaeangliae*); bowhead whale (*Balaena mysticetus*); North Atlantic right whale (*Eubalaena glacialis*); North Pacific right whale (*Eubalena japonica*); southern right whale (*Eubalaena australis*); gray whale (*Eschrichtius robustus*); sperm whale (*Physeter macrocephalus*); the Cook Inlet stock of beluga whale (*Delphinapterus leucas*); the Southern Resident population of Killer whale (*Orca orcinus*); the western distinct population segment (DPS) of the Steller sea lion (*Eumetopias jubatus*); Mediterranean monk seal (*Monachus monachus*); and Hawaiian monk seal (*Monachus schauinslandi*). In addition, the Hawaiian insular distinct population segment of false killer whale (*Pseudorca crassidens*) is a candidate for proposed listing as endangered.

The three threatened marine mammal species under our jurisdiction include: the eastern distinct population segment of the Steller sea lion (currently proposed for delisting); the Guadalupe fur seal (*Arctocephalus townsendi*) and the southern distinct population segment of the spotted seal (*Phoca largha*).

The threatened and endangered marine mammal species mentioned previously are also depleted under the Marine Mammal Protection Act. Other species listed as depleted include: the western north Atlantic coastal stock of bottlenose dolphin (*Tursiops truncatus*); the northeastern offshore stock of the pantropical spotted dolphin (*Stenella attenuata*); and the eastern stock of the spinner dolphin (*Stenella longirostris*).

Ringed seals (*Phoca hispida*), bearded seals (*Erignathus barbatus*), Chinese river dolphins (*Lipotes vexillifer*) and the vaquita (*Phocoena sinus*) do not occur within the Navy's potential SURTASS LFA sonar operational areas (see 77 FR 842; January 6, 2012; page 844).

The U.S. Fish and Wildlife Service is responsible for managing the following marine mammal species: southern sea otter (*Enhydra lutris*), polar bear (*Ursus maritimus*), walrus (*Odobenus rosmarus*), west African manatee (*Trichechus senegalensis*), Amazonian manatee (*Trichechus inunguis*), west Indian manatee (*Trichechus manatus*), and dugong (*Dugong dugon*). None of these species occur in geographic areas that would overlap with potential SURTASS LFA sonar operational areas.

The Description of Marine Mammals in the Area of the Specified Activities section has not changed from what was in the proposed rule (77 FR 842; January 6, 2012; pages 848–857). Tables 3 through 21 of the proposed rule provided lists of marine mammal species known to occur or potentially occur within the Navy's models of potential SURTASS LFA sonar operational areas relevant to U.S. national security interests. Tables 4.5 through 4.23 in the 2012 FSEIS/SOEIS also provide information on the percentages of stocks potentially affected by SURTASS LFA sonar operations. Although not repeated in this final rule, we have reviewed these data, determined them to be the best available scientific information for the purposes of the rulemaking, and consider this information part of the administrative record for this action.

Potential Effects of the Specified Activity on Marine Mammals

For the purpose of MMPA authorizations, our effects assessments serve four primary purposes:

(1) Identification of the permissible methods of taking, meaning the nature of the take (e.g., resulting from anthropogenic noise versus from ship strike, etc.); the regulatory level of take (i.e., mortality versus Level A or Level B harassment); and the estimated amount of take;

(2) Informing the prescription of means of effecting the least practicable adverse impact on such species or stock and its habitat (i.e., mitigation);

(3) Supporting the determination of whether the specified activity will have a negligible impact on the affected species or stocks of marine mammals (based on the likelihood that the activity will adversely affect the species or stock through effects on annual rates of recruitment or survival); and

(4) Determining whether the specified activity will have an unmitigable adverse impact on the availability of the species or stock(s) for subsistence uses.

In the Potential Effects of the Specified Activity on Marine Mammals section of the proposed rule, we included a qualitative discussion of the different ways that SURTASS LFA sonar operations may potentially affect marine mammals without consideration of mitigation and monitoring measures (see 77 FR 842; January 6, 2012; pages 860–874). Marine mammals may experience direct physiological effects (e.g., threshold shift and non-acoustic injury, acoustic masking, impaired communication, stress responses, behavioral disturbance, stranding, behavioral responses from vessel movement, and injury or death from vessel collisions). The information contained in this section in the proposed rule has not changed.

Later in the Estimated Take of Marine Mammals section in this document, we relate and quantify the potential effects to marine mammals from SURTASS LFA sonar operations discussed in this section to the MMPA definitions of Level A and Level B harassment.

Anticipated Effects on Marine Mammal Habitat

We anticipate that the specified activity may result in marine mammals avoiding certain areas due to temporary ensonification. This impact is temporary and reversible, which we considered in proposed rule as behavioral modification. The main impact associated with the activity would be temporarily elevated noise levels and the associated direct effects on marine mammals.

We included a detailed discussion of the potential effects of the Navy's SURTASS LFA sonar operations on marine mammal habitat, including critical habitat and marine mammal prey species (77 FR 842; January 6, 2012; pages 874–875). The information contained in the Anticipated Effects on Marine Mammal Habitat section has not changed from what was in the proposed rule.

Mitigation

In order to issue regulations and LOAs under section 101(a)(5)(A) of the MMPA, we must set forth the ''permissible methods of taking pursuant to such activity, and other means of effecting the least practicable adverse impact on such species or stock and its habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance.''

The National Defense Authorization Act for Fiscal Year 2004 amended section 101(a)(5)(A) of the MMPA such that ''least practicable adverse impact'' shall include consideration of personnel safety, practicality of implementation, and impact on the effectiveness of the ''military readiness activity.'' The routine training and testing as well as use of the system during military operations described in the SURTASS

LFA sonar application qualify as military readiness activities.

We have reviewed the Navy's proposed SURTASS LFA sonar activities and the proposed mitigation measures in the Navy's application to determine whether the resulting activities and mitigation measures would effect the least practicable adverse impact on marine mammals which includes a careful balancing of the likely degree to which the measure is expected to minimize adverse impacts to marine mammals with the likely effect of that measure on personnel safety, practicality of implementation, and impact of the effectiveness of the military readiness activity (i.e., minimizing adverse impacts to the lowest level practicable with mitigation measures).

Any mitigation measure that we prescribe should be able to accomplish, have a reasonable likelihood of accomplishing (based on current science), or contribute to the accomplishment of one or more of the general goals listed here:

Goal (a): Avoidance or minimization of injury or death of marine mammals wherever possible (goals b, c, and d may contribute to this goal).

Goal (b): A reduction in the numbers of marine mammals (total number or number at biologically important time or location) exposed to received levels of SURTASS LFA sonar or other activities expected to result in the take of marine mammals (this goal may contribute to goal a or to reducing harassment takes only).

Goal (c): A reduction in the number of times (total number or number at biologically important time or location) individuals would be exposed to received levels of SURTASS LFA sonar or other activities expected to result in the take of marine mammals (this goal may contribute to goal a or to reducing harassment takes only).

Goal (d): A reduction in the intensity of exposures (either total number or number at biologically important time or location) to received levels of SURTASS LFA sonar or other activities expected to result in the take of marine mammals (this goal may contribute to goal a or to reducing the severity of harassment takes only).

Goal (e): A reduction in adverse effects to marine mammal habitat, paying special attention to the food base, activities that block or limit passage to or from biologically important areas, permanent destruction of habitat, or temporary destruction/disturbance of habitat during a biologically important time.

Goal (f): For monitoring directly related to mitigation—an increase in the probability of detecting marine mammals, thus allowing for more effective implementation of the mitigation.

We described the Navy's proposed mitigation measures, as well as those that we added, in detail in the proposed rule (77 FR 842; January 6, 2012; pages 875–879). These required mitigation measures, which are summarized below, have not changed with the exception of the addition of one more OBIA. Following are the mitigation and monitoring measures initially proposed by the Navy:

- A 180-dB re:1 μPa isopleth SURTASS LFA sonar mitigation zone around the vessel;
- Delay or suspension of SURTASS LFA sonar transmissions if the Navy detects a marine mammal entering or within the LFA sonar mitigation zone (i.e., the 180-dB re: 1 μPa isopleth) by any of the following detection methods;
  (a) Visual monitoring;
  (b) Passive acoustic monitoring; or
  (c) Active acoustic monitoring;
- Geographic and operational restrictions to avoid generating sound levels above 180 dB re: 1 μPa in the following areas:
  (a) An OBIA; or
  (b) Within coastal standoff zones (22 km; 14 mi; 12 nm of any coastline).

In the proposed rule, we added the following mitigation requirements:

- An additional 1-km (0.62 mi; 054 nm) buffer zone around the 180-dB re: 1 μPa isopleth SURTASS LFA sonar mitigation zone;
- An additional 1-km (0.62 mi; 054 nm) buffer zone seaward of any OBIA boundary.
- Delay or suspension of SURTASS LFA sonar transmissions if the Navy detects a marine mammal entering the 1-km (0.62 mi; 054 nm) buffer zone around the SURTASS LFA sonar mitigation zone.

Within this final rule, we have added additional mitigation measures based upon comments received during the public comment period for the proposed rule (77 FR 842; January 6, 2012) and the Navy's 2011 Draft Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement.

Based on our evaluation of 367 potential areas within the Hoyt's (2011) 2nd Edition of Marine Protected Areas for Whales, Dolphins and Porpoises (see Appendix F of the Navy's 2012 FSEIS/SOEIS), we identified three additional areas for consideration as OBIAs for marine mammals. They were: (1) Abrolhos Bank in the southwest Atlantic Ocean; (2) an area within the Southeast Shoal, Grand Bank in the northwest Atlantic Ocean; and 3) an area within Dogger Bank in the North Sea.

Abrolhos Bank: For this rule, we have added the Abrolhos Bank as an OBIA based on its importance for humpback whale breeding and calving. The specified period of this OBIA would be effective August through November. The Navy concurs with our recommendation to designate Abrolhos Bank as an OBIA.

Southeast Shoal, Grand Bank: There is evidence from a single 1985 line transect survey that humpback whales foraged in this area in the past; however, this information is almost 30 years old. We and the Navy are continuing to gather information to determine whether this area meets the OBIA criteria.

In the 2012 application for LOAs, the Navy states that it does not plan to operate within the northwest Atlantic Ocean in the first year of this rule. Utilizing the adaptive management framework, we and the Navy will make a decision before issuing the second annual LOAs regarding whether this area meets the OBIA criteria and, if so, can be practicably implemented.

Dogger Bank: There is evidence from a single 2007 line transect survey that minke whales aggregated on the slope of Dogger Bank to forage on sandeels (de Boer, 2010). However, sandeels only emerge from their sand burrows when oceanographic conditions are optimal (de Boer, 2010). There is not enough information to support this area as a sustained and predictable foraging ground for minke whales at this time. We will continue to monitor and re-evaluate this area as researchers complete additional surveys on Dogger Bank within the next few years. Utilizing the adaptive management framework, we and the Navy will make a decision before issuing the second annual LOAs regarding whether this area meets the OBIA criteria and, if so, can be practicably implemented.

Operational Exception

We discussed the Navy's need for an operational exception for use of the SURTASS LFA sonar system in the proposed rule (77 FR 842; January 6, 2012; page 878). The information contained in this section has not changed from what was in the proposed rule. Briefly, it may be necessary for the Navy to operate in a manner that results in SURTASS LFA sonar transmissions generating sound levels above 180 dB re: 1 μPa within an OBIA, or for Navy to operate within an OBIA: (1) When it is operationally necessary for the Navy

to continue tracking an existing underwater contact; or (2) when it is operationally necessary for the Navy to detect a new underwater contact within the area. This exception does not apply to routine training and testing with the SURTASS LFA sonar systems.

Mitigation Conclusions

Based on our evaluation of the proposed measures and other measures considered by us or recommended by the public, we have determined that the required mitigation measures (including the Adaptive Management component described later in this document) are means of effecting the least practicable adverse impacts on marine mammal species or stocks and their habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, while also considering personnel safety, practicality of implementation, and impact on the effectiveness of the military readiness activity. The proposed rule contains further support for this finding in the Mitigation Conclusion section (77 FR 842; January 6, 2012; pages 878–879).

Research

We included a discussion of the Navy's proposed research that increases the knowledge base about marine mammals and the potential effects from underwater anthropogenic noise (77 FR 842; January 6, 2012; pages 879–880). The information contained in Research has not changed from what was in the proposed rule.

Briefly, the Navy sponsors significant research and monitoring projects for living marine resources to study the potential effects of its activities on marine mammals. This ongoing marine mammal research relates to hearing and hearing sensitivity, auditory effects, dive and behavioral response models, noise impacts, beaked whale global distribution, modeling of beaked whale hearing and response, tagging of free-ranging marine animals at-sea, and radar-based detection of marine mammals from ships. These research projects may not be specifically related to SURTASS LFA sonar operations; however, they are crucial to the overall knowledge base on marine mammals and the potential effects from underwater anthropogenic noise.

Monitoring

Section 101(a)(5)(A) of the MMPA states that in order to issue an Incidental Take Authorization for an activity, we must set forth ''requirements pertaining to the monitoring and reporting of such taking.'' Our implementing regulations at 50 CFR 216.104 (a)(13) indicate that requests for Letters of Authorization must include the suggested means of accomplishing the necessary monitoring and reporting that will result in increased knowledge of the species, the level of taking, or impacts on populations of marine mammals that we expect to be present.

We provided a detailed description of the general goals of monitoring and the Navy's proposed monitoring measures in the proposed rule (77 FR 842; January 6, 2012; page 880). Within this final rule, we have added additional monitoring requirements for harbor porpoises and beaked whales based upon comments received during the public comment periods for the proposed rule. This additional monitoring would augment the Navy's proposed monitoring efforts to increase our understanding of how these species respond–behaviorally or physiologically–to SURTASS LFA sonar.

Beaked Whale and Harbor Porpoise Monitoring

Within the first year of the five-year rule, the Navy will convene a Scientific Advisory Group (SAG). Its goal will be to analyze different types of monitoring and research that could increase the understanding of the potential effects of low-frequency active sonar transmissions on beaked whales and/or harbor porpoises.

The Navy will work closely with the SAG to characterize likely available assets and resources to help them frame their analysis, in order to identify monitoring/research options that would be most feasible for the Navy to implement. SAG members will include recognized marine biology and marine bio-acoustic scientific subject matter experts. The results from the SAG meeting will be considered independent scientific findings, fully accessible to the public.

The Navy's execution of any monitoring/research with beaked whales or harbor porpoises recommended in the SAG's findings will necessarily depend on the availability of scientists with the appropriate background and experience to execute the field research, as well as the availability of adequate resources to plan and conduct the research project and to process, analyze, and report on the collected data.

Following the SAG's submission of findings, and assuming the SAG recommends going forward with beaked whale and/or harbor porpoise monitoring/research, the Navy will either: (1) Draft a plan of action outlining their strategy for implementing the SAG's recommendations, or (2) describe, in writing, why none of the SAG's recommendations are feasible and meet with us to discuss any other potential options.

With the exception of the additional monitoring requirement for harbor porpoises and beaked whales, the information on monitoring in the proposed rule has not changed.

Adaptive Management

Our understanding of the potential effects of SURTASS LFA sonar on marine mammals is continually evolving. Reflecting this, this final regulation governing the take of marine mammals, incidental to the Navy's SURTASS LFA sonar operations contains an adaptive management component. We provided a description of the general framework for adaptive management in the proposed rule (77 FR 842; January 6, 2012; pages 880–881). The information contained in this section has not changed from the proposed rule description.

This framework provides a mechanism for NMFS and the Navy to modify (or add or delete) mitigation or monitoring measures, as appropriate, based on new information.

The following are some of the possible sources of new data that could contribute to our decision to modify mitigation or monitoring measures:

- Results from the Navy's monitoring from the previous year's operation of SURTASS LFA sonar.
- Compiled results of Navy-funded research and development studies.
- Results from specific stranding investigations.
- Results from general marine mammal and sound research funded by the Navy or other sponsors.
- Any information that reveals marine mammals may have been taken in a manner, extent or number not authorized by this regulation or within subsequent Letters of Authorization.

We would add, modify or delete mitigation or monitoring measures in consultation with the Navy if doing so creates a reasonable likelihood of accomplishing the goals of mitigation and monitoring laid out in this final rule. We and the Navy will meet annually (if deemed necessary by either agency) to discuss the monitoring reports, Navy research and development outcomes, current science, and determine whether mitigation or monitoring modifications are appropriate.

Reporting

In order to issue an incidental take authorization for an activity, section 101(a)(5)(A) of the MMPA states that we must set forth requirements pertaining to the monitoring and reporting of such taking. Effective reporting is critical to ensure compliance with the terms and conditions of the Letters of Authorization, and to provide us and the Navy with data of the highest quality based on the required monitoring. A subset of the monitoring reports' information may be classified and thus not releasable to the public.

We provided a detailed description of the Navy's proposed reporting requirements in the proposed rule (77 FR 842; January 6, 2012; pages 881–882). The information contained in the Reporting section has not changed from the proposed rule description. Briefly, the reporting measures require the Navy to provide: notification of injured or dead marine mammals; notification of a ship strike; quarterly mitigation monitoring reports; annual reports; and a five-year comprehensive report.

Comments and Responses

On January 6, 2012, we published a proposed rule (77 FR 842) in response to the Navy's request to take marine mammals, incidental to conducting SURTASS LFA sonar operations in certain areas of the world's oceans. We requested comments, information, and suggestions related to the request. During the 30-day public comment period, we received comments from the Marine Mammal Commission (Commission), the Natural Resources Defense Council (NRDC), OceanCare, the Surfrider Foundation, and 22 private citizens. We also received comments that appear to be directed solely at the Navy's draft 2011 Supplemental Environmental Impact Statement/Supplemental Overseas Environmental Impact Statement. See the Navy's 2012 FSEIS/SOEIS, which we have adopted. We address the comments here.

Marine Mammal Protection Act Concerns

Comment 1: Citing the broad scope of the Navy's application, the complexity of the proposed rule, and the need for additional time for public comment, the Natural Resources Defense Council requested that we consider extending the public comment period for an additional 15 days.

Response: In response to the request, we extended the public comment period by 15 extra days (77 FR 6771, February 9, 2012).

SURTASS LFA Sonar Activity Concerns

Comment 2: One commenter is concerned that the Navy seems to take very few steps to reduce its use of sonar by using alternative technologies and noted that the Navy could pursue the use of other technologies for this action.

Response: The comment is beyond the scope of our rulemaking for this action. The Navy's specified activity described in their application for regulations is the use of SURTASS LFA sonar, not alternatives to SURTASS LFA sonar.

However, the Navy reviewed and considered the use of non-acoustic alternatives for underwater detection (i.e., radar, laser, magnetic, infrared, electronic, electric, hydrodynamic, and biologic detection systems) in the 2012 FSEIS/SOEIS (see subchapter 1.1.4).

Table 1 in this **Federal Register** notice summarizes a projected annual deployment schedule for SURTASS LFA sonar which amounts to 432 hours (18 days) of active transmissions, annually, for one surveillance vessel. The SURTASS LFA sonar has a relatively low duty cycle (i.e., the amount of time of active sonar transmissions divided by the amount of time that the sonar is not transmitting) of 7.5 to 10 percent. Thus, for an estimated 18-day mission period, SURTASS LFA sonar would be off (quiet) for 90 to 92.5 percent of the time and adding no sound into the water. On an annual basis, the Navy would limit each SURTASS LFA vessel to transmitting no more than 4.9 percent of the time (i.e., 432 hours within one year (8,760 hours)).

Threatened and Endangered Species

Comment 3: One commenter expressed concern that the Navy had underestimated the full impact that sonar has on marine mammals, particularly ones which are also listed under the Endangered Species Act. They stated: ''The Navy's application for authorized use of SURTASS LFA sonar states that the effects of sonar use will not be greater on animals listed under the ESA than the effects on other marine mammals (LOA Application at page 114.)''

Response: The commenter's statement is not accurate. First, the Navy has analyzed the effects of SURTASS LFA sonar on marine mammals, including those listed under the Endangered Species Act, in the 2001 Final Environmental Impact Statement (Don, 2001), the 2007 Final Supplemental Environmental Impact Statement (DoN, 2007) and the 2012FSEIS/SOEIS. Specifically, the types of potential effects on marine mammals from SURTASS LFA sonar operations presented include: (1) Non-auditory injury; (2) permanent loss of hearing; (3) temporary loss of hearing; (4) behavioral change; and (5) masking. We refer the commenter to those documents for the Navy's analysis of the effects of SURTASS LFA sonar on marine mammals.

Second, we also analyzed the effects of SURTASS LFA sonar on marine mammals in the Potential Effects of the Specified Activity on Marine Mammals section of the proposed rule (77 FR 842; January 6, 2012; pages 860–874). We included a qualitative discussion of the different ways that unmitigated SURTASS LFA sonar operations may result in direct physiological effects (e.g., threshold shift and non-acoustic injury, acoustic masking, impaired communication, stress responses, behavioral disturbance, stranding, and effects from vessel movement and vessel collisions). We anticipate that actual effects to marine mammals (including threatened and endangered species) would be in the form of Level B harassment (behavioral), due to the required mitigation and monitoring measures, and geographic restrictions. While marine mammals could potentially be affected by the SURTASS LFA sonar sounds, we have determined that these effects are not reasonably likely to adversely affect the species or stock through effects on annual rates of recruitment or survival.

Finally, previous Endangered Species Act section 7 consultations (NMFS, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, and 2011) and the section 7 consultation for this rule have analyzed the effects of SURTASS LFA sonar operations on threatened and endangered marine mammals and concluded that the operation of the SURTASS LFA sonar was not likely to jeopardize the continued existence of any endangered or threatened species under our jurisdiction and would not result in the destruction or adverse modification of critical habitat.

Comment 4: One commenter stated: ''The LOA application states that the Jacksonville training would occur in the winter, yet the winter months are the time when this area is listed as an OBIA (LOA Application at 11–13). Will the Navy be conducting SURTASS LFA training here during calving months? If yes, what will the impact be on the young whales? The diminished population of North Atlantic Right Whales should not have to compete with the Navy for this area. The proper time to conduct training here would be in the summer months when the whales

return to the New England and Canadian coast.''

Response: First, the Navy's application states that the Western Atlantic/Jacksonville Operational Area is a potential area for SURTASS LFA sonar operations; it does not state that training would occur in the area in the winter. This area is one of 19 potential sites that they modeled and analyzed during the winter to assess potential impacts to marine mammals for the rule and the Letter of Authorization application process.

We have designated the U.S. Right Whale Seasonal Habitat as an OBIA specifically to mitigate effects on north Atlantic right whales and their calves during the winter months. Moreover, because we are also requiring the Navy to implement an additional 1-km (0.62 mi; 054 nm) buffer zone seaward of the outer perimeter of this OBIA, these mitigation measures ensure that sound levels within the area do not exceed approximately 175dB re: 1 µPa from November 15 through April 15, the calving months.

If the Navy were to operate within the greater Jacksonville Operational Area outside of the U.S. Right Whale Seasonal Habitat OBIA, the rule requires the Navy to conduct visual, passive acoustic, and active acoustic monitoring and suspend/delay SURTASS LFA sonar transmissions if a marine mammal enters the 2-km (1.2-mi; 1.1-nm) LFA mitigation and buffer zones around the vessel.

In each annual application, the Navy will include information if it plans to operate (or not operate) within the Western Atlantic/Jacksonville Operational Area. Thus, at this time we cannot say if the Navy intends to operate in the Western Atlantic/Jacksonville Operational Area during the period of November through January (i.e., calving months) with the exception of the first year of SURTASS LFA sonar operations, where the Navy has stated in its application, that it does not intend to operate in this area.

To clarify, Table 21 in the Navy's application presents estimates of the percentage of marine mammal stocks potentially affected by SURTASS LFA sonar in the proposed mission area of the Western Atlantic/Jacksonville Operational Area. The Navy has modeled potential effects to all marine mammals in the Western Atlantic/Jacksonville Operational Area during the winter in the 2012 FSEIS/SOEIS (see Tables 4–17 and C–29). If the Navy conducted SURTASS LFA operations in the winter, the Navy's risk estimates predict that 0.12 percent of the north Atlantic right whale population could be potentially exposed to sound levels that may lead to Level B harassment.

Comment 5: A commenter discussed the Navy's estimates of the percentage of marine mammal stocks potentially affected by SURTASS LFA sonar in the proposed mission area of the Sea of Japan operating area. He stated: ''The summer feeding grounds of Western Gray [whales] is located in the Sea of Okhotsk and is part of an OBIA which restricts the Navy from training there. The migratory patterns and route of these whales is largely unknown but is presumed to take them south to Korea. If this is the case then the whales will be migrating through the Sea of Japan during the spring and fall, the modeled season for training.''

Response: Based upon the best available information, we found few data to support designating an area within the Sea of Japan as a migration corridor (i.e., an OBIA for SURTASS LFA sonar). However, any western Pacific gray whales transiting through the Sea of Japan will be protected from exposure to sound pressure levels greater than approximately 175dB re: 1 µPa by the Navy's three-part monitoring protocols and required mitigation measures contained in this regulation.

Comment 6: The same commenter as in Comment 5 also stated: ''There are many other marine mammal populations that are listed under the ESA that occupy areas close to proposed SURTASS LFA training areas. Due to the fragile nature of these populations, the Navy should afford these animals extra protection to maximize their chance of survival and recovery. The SURTASS training in this area could affect the whale's navigation or migration patterns and these populations will not be able to recover from endangered levels when human interactions affect their behavior. The Navy should make a concerted effort to ensure that sonar is not used in areas where ESA species are currently migrating, calving, and feeding.''

Response: See response to Comment 3. We are unclear as to which area or species the commenter referred. We designated OBIAs based on certain criteria and the best available information we had for marine mammals to determine if any areas met the criteria. In some cases, we designated an OBIA because a species listed under the Endangered Species Act has designated critical habitat, breeds, calves, migrates, or forages in a particular area. For example, we designated four OBIAs for north Atlantic right whales, one OBIA each for north Pacific right and fin whales, 10 OBIAs for humpback whales, and six OBIAs for blue whales. Beyond that, the standard mitigation and monitoring measures that apply wherever the Navy operates SURTASS LFA sonar will ensure that marine mammals are not exposed to sound levels that exceed approximately 175 dB re: 1 µPa. Finally, the Navy will perform mission planning for annual Letters of Authorization applications and would limit operation of SURTASS LFA sonar to ensure that no more than 12 percent of any marine mammal stock would be taken by Level B harassment annually, over the course of this five-year regulation.

We anticipate that effects to marine mammals (including threatened and endangered species) would be in the form of Level B harassment (behavioral), due to the required mitigation measures, geographic restrictions, and sporadic nature of the SURTASS LFA sonar operations. While marine mammals may be affected by the SURTASS LFA sonar sounds, we have determined that these effects are not reasonably likely to adversely affect the species or stock through effects on annual rates of recruitment or survival.

Comment 7: One commenter stated: ''There exists significant risk to Southern Resident Killer Whales (SRKW), who are listed as an endangered distinct species population [distinct population segment] under the ESA, in addition to being protected under the MMPA. The critical habitat for these animals is near the San Juan Archipelago in Washington State, near the U.S.-Canadian Border. If sonar use causes mass strandings similar to the incident in the Bahamas in 2000, it could have permanent negative consequences on the long-term survival of this species. While the application and proposed NMFS ruling say harassment is the only foreseen consequence, the mass stranding event in the Bahamas strongly suggests at least the possibility of significant mortality occurring. Additionally J Pod, one of the three SRKW pods, has already had a brush with Navy sonar, along with multiple other marine mammals in the area. While the Navy claims there were no adverse effects from the Sonar output of the USS Shoup in May of 2003, local scientists disagree, and NMFS' own findings were inconclusive. Such uncertain or dissenting expert opinions should create enough doubt in any educated mind and the benefit of this doubt should be given to the whales, not the Navy.

This application should be reconsidered. If an Unusual Mortality Event (UME) were to occur in the San Juan Islands, this would have a ripple effect on the entire ecosystem not just

the various marine mammals in the area. Furthermore, if a UME were to occur involving the SRKW population, this would have a serious detriment on the local tourism economy of the San Juan Islands, creating a direct harm on local citizens and the local economy in addition to the ecological concerns already mentioned.''

Response: Based on the best available information, SURTASS LFA sonar is not associated with strandings of marine mammals. SURTASS LFA sonar has operated subject to our regulations for the last nine years without any reports of strandings since the Navy began using the system operationally in the early 2000s. The Stranding and Mortality section in the proposed rule (77 FR 842; January 6, 2012; pages 871–872) presented information on the potential for stranding from SURTASS LFA sonar as well as information on strandings associated with mid-frequency active sonar use.

Over the past 12 years, there have been five stranding events coincident with military mid-frequency active sonar use in which exposure to sonar is believed (by NMFS and the Navy) to have been a contributing factor to strandings, including the Bahamas (2000). We refer the reader to Cox *et al.* (2006) for a summary of the Bahamas strandings event.

We have also provided a summary of the Navy's acoustic modeling scenarios and risk analysis methods in the proposed rule (77 FR 842; January 6, 2012; pages 859–860). Based upon the best available scientific information, while marine mammals may be potentially affected by the SURTASS LFA sonar sounds, we have determined that these effects are not reasonably likely to adversely affect the species or stock through effects on annual rates of recruitment or survival.

Second, there are three areas designated as critical habitat for the Southern Resident killer whale: the Summer Core Area in Haro Strait and waters around the San Juan Islands; Puget Sound; and the Strait of Juan de Fuca (71 FR 69054, November 29, 2006). These areas are within 22 km (14 mi; 12 nm) of the Washington coastline and thus under our criteria are not OBIAs, but rather fall within the coastal exclusion zone, where sound pressure levels will not exceed 180 dB re: 1 μPa. We also note that sound pressure levels will not exceed approximately 175 dB re: 1 μPa at 1 km (0.62 mi; 054 nm) seaward of the boundary of the OBIA for the Olympic Coast National Marine Sanctuary, the Prairie, Barkley Canyon, and Nitnat Canyon.

NMFS' final rule designating critical habitat for the Southern Resident killer whale (71 FR 69054, November 29, 2006) did not recognize any offshore areas (where the Navy could potentially operate SURTASS LFA sonar) that might qualify as an OBIA for the Southern Resident killer whales. Further, if the Navy were to operate in offshore areas, where individuals of this species are present, they would be protected from sound pressure levels in excess of approximately 175 dB re: 1 μPa via the Navy's three-part monitoring and shutdown/delay protocols.

Finally, the reporting measures in this regulation require the Navy to provide us with a notification that includes reports of injured or dead marine mammals as well as notification of a ship strike.

Comment 8: One commenter stated: ''The Administrative Procedure Act requires agencies such as NMFS to give a reasonable explanation of their decisions. This is to prevent agency decisions from being ''arbitrary and capricious.'' In this case, part of the Navy's LOA application, and part of the reasoning of NMFS, is that: (1) ESA species won't be additionally affected, and (2) it is unlikely these effects will rise past mere harassment. However, as discussed in this comment, there is evidence contradicting both of those statements. We believe that when an agency fails to at least address contradictory evidence in its decision making, those decisions will likely be too arbitrary and capricious to satisfy the APA.''

Response: See our responses to Comments 3, 4, and 5. While threatened and endangered marine mammals may be potentially affected by the SURTASS LFA sonar sounds, we have determined that these effects will be limited to Level B behavioral harassment and are not reasonably likely to adversely affect the species or stock through effects on annual rates of recruitment or survival, NMFS has also determined this action is not likely to jeopardize the continued existence of any endangered or threatened species under our jurisdiction or result in the destruction or adverse modification of critical habitat.

We included a detailed discussion of the potential effects of the Navy's SURTASS LFA sonar operations on marine mammals (including threatened and endangered species), marine mammal habitat, critical habitat, compliance with maritime laws, marine protected areas, and potential physiological and behavioral effects on marine mammals in the **Federal Register** notice of the proposed rule (77 FR 842; January 6, 2012). We have explained the basis for our findings under 16 U.S.C. 1371(a)(5)(A) and our implementing regulations to support issuance of the final rule and Letters of Authorization to the Navy. We disagree that our findings in this rulemaking are arbitrary and capricious.

Acoustic Thresholds for Threshold Shift

Comment 9: One commenter noted that although the Navy is restricted from testing sonar within 22 kilometers of shore and within any Offshore Biologically Important Area, the Navy estimates that sonar waves can retain an intensity of 140 decibels from as far away as 300 miles (NRDC, Lethal Sounds).

Response: We refer the commenter to Appendix C of the 2012 FSEIS/SOEIS for more detailed information on the Navy's modeling of sonar sound waves.

Richardson *et al.* (1995) stated that it would be unlikely that any marine mammal would remain for long in areas where there was continuous underwater noise exceeding 140 dB re: 1 μPa. In fact, the Navy's Low Frequency Sonar Scientific Research Program, which assessed the potential impacts of SURTASS LFA sonar on the behavior of low-frequency hearing specialists, noted no reduction in sighting rates and no reduction in acoustic detection within the vicinity of the SURTASS LFA sonar source vessel during the studies which lasted for several weeks (DoN, 2001). In all three phases of the Program (Clark *et al.,* 2001), most animals showed little to no response to SURTASS LFA sonar signals at received levels up to 155 dB re: 1 μPa, and those individuals that did show a response resumed normal activities within tens of minutes. Thus, avoidance of the greater than 140 dB re: 1 μPa zone of exposure occurred much less than expected. At this received level of sound, the Navy's model for SURTASS LFA sonar estimates that the risk of significant change in a biologically important behavioral is low (less than one percent).

Behavioral Harassment Threshold

Comment 10: One commenter stated that the MMPA itself states: ''[T]here is inadequate knowledge of the ecology and population dynamics of such marine mammals and of the factors which bear upon their ability to reproduce themselves successfully.'' 16 U.S.C. 1361(2)(3). Broadly, this inadequacy seems to be most exposed in our understanding of Level B harassment of these creatures by LFA sonar, which involves such a vast and as-yet-unknown spectrum of possible

behavioral responses by the animals to the technology.''

Response: We don't have a perfect understanding of marine mammal behavioral responses, but we have sufficient information (based on multiple LFA sonar-specific studies, marine mammal hearing/physiology/anatomy, and an extensive body of studies that address impacts from exposure to other anthropogenic sources) to be able to assess potential impacts and design mitigation and monitoring measures to ensure that the Navy's action will avoid the worst effects and have a negligible impact on the affected species and stocks. With this information, we can make the necessary findings under 16 U.S.C. 1371(a)(5)(A) and our implementing regulations and can say with confidence that the Navy's level of effort, including its mission planning, adequately offset the unknowns.

For example, the Navy's Low Frequency Sonar Scientific Research Program (1997–98) assessed the potential impacts of SURTASS LFA sonar on the behavior of low-frequency hearing specialists accounting for three important behavioral contexts for baleen whales: foraging, concentrated migrations, and breeding. The sonar playback experiments focused on baleen species: (1) Blue and fin whales feeding in the southern California Bight, (2) gray whales migrating past the central California coast, and (3) humpback whales breeding off Hawaii. Over the course of the sonar playback experiments, the researchers exposed the marine mammals to received levels ranging from approximately 120 to 155 dB re: 1 μPa. They detected only minor, short-term, behavioral responses by changing their vocal activity, moving away from the source vessel (Clark *et al.,* 2001). Post-playback, the whales (in each case) resumed normal activities within tens of minutes after the initial exposure to the SURTASS LFA signal (Clark *et al.,* 2001).

In the Potential Effects of the Specified Activity on Marine Mammals section of the proposed rule (77 FR 842; January 6, 2012; pages 860–874), we included a qualitative discussion of the different ways that SURTASS LFA sonar operations may potentially affect marine mammals, which was based on the LFA sonar-specific study above as well as many other studies addressing the impacts of other anthropogenic sources.

Strandings and Mortality

Comment 11: Mass strandings of marine mammals should haunt this program, for although direct causal relationships are difficult to establish between the sonar and the strandings, evidence is not entirely lacking.

Response: See Response to Comment 7.

Offshore Biologically Important Areas

Comment 12: One commenter (who was also a subject matter expert on the panel that helped identify OBIAs) felt that the review process to determine OBIAs was limited, creating poor precedent for identifying and protecting marine mammal habitat. The commenter described difficulty in determining how representative the selected areas for marine mammals were or how well they reflected the collective knowledge of a limited number of solicited individuals.

The NRDC also commented that some regions had no experts assigned to them (e.g., Australia); some had only one (e.g., offshore Africa and South America) and suggested that the subject matter experts nominated only those areas they had particular knowledge of rather than attempt a systematic review of an entire oceanic basin or region.

Response: We appreciate the first commenter's efforts in assisting us with identifying OBIAs for SURTASS LFA sonar and we believe that we have used the best available information (including but not limited to input from subject matter experts) to identify OBIAs globally.

We designate OBIAs (based upon qualifying criteria) to protect marine mammals in areas that are biologically important for them. For this process we used the best available data to assess ocean areas greater than 22 km (14 mi; 12 nm) from any shoreline with: (1) High densities of marine mammals; (2) known/defined breeding/calving grounds, foraging grounds, migration routes; or (3) small, distinct populations of marine mammals with limited distributions.

To eliminate the potential for geographic bias in the OBIA selection process, our initial scoping of potential OBIAs encompassed a review of 16 marine regions as designated by the World Commission on Protected Areas (IUCN World Commission on Protected Areas—WCPA): Region 3—Mediterranean; Region 4—northwest Atlantic; Region 5—Northeast Atlantic; Region 6—Baltic; Region 7—Wider Caribbean; Region 8—West Africa; Region 9—south Atlantic; Region 10—central Indian Ocean; Region 11—Arabian Sea; Region 12—East Africa; Region 13—east Asian Sea; Region 14—south Pacific; Region 15—northeast Pacific; Region 16—northwest Pacific; Region 17—southeast Pacific; and Region 18—Australia/New Zealand. We did not include the polar regions (i.e., Regions 1 and 2) in our scoping process because they are non-operational areas for SURTASS LFA sonar.

Initially, we reviewed 403 existing and potential marine protected areas based on the World Database on Protected Areas (WDPA) (IUCN and UNEP, 2009), the Whale and Dolphin Society's online Directory of Cetacean Protected Areas around the World (2009) based upon Hoyt (2005), and prior SURTASS LFA sonar OBIAs. Within that initial review, over 80 percent (340) of the areas were within 22 km (14 mi; 12 nm) of the coastline and are already included in the coastal standoff zone, so they did not qualify for further OBIA consideration. We screened the remaining areas under our OBIA criteria and produced a preliminary list of 27 OBIAs for the subject matter experts to review.

The subject matter experts with expertise in geographic regions including the Atlantic, Pacific, and Indian Oceans, and the Mediterranean Sea, provided their individual analyses of our preliminary list of OBIA nominees and provided additional recommendations for additional OBIAs, resulting in a total number of 73 potential OBIAs. We solicited subject matter experts for Australia and New Zealand but were unsuccessful in finding any volunteers willing to participate in our process. However, we independently reviewed the waters around Australia and New Zealand (Region 18—Australia/New Zealand) and suggested two OBIAs: OBIA # 18—Great Barrier Reef 16° S to 21° S; and OBIA # 19—Bonney Upwelling/Southwestern Australia.

To ensure that we ranked the 73 nominated areas consistently, we screened the nominations for sufficient scientific support, assigning a rank of zero (lowest) to four (highest) depending upon the robustness of the supporting documentation for the selection criteria. Our classification methodology appears on page D–104 of the FSEIS/SOEIS. This framework we developed ensures that the information available for each potential OBIA supports the presence of the relevant OBIA criteria. Briefly, the scores are:

- Level 0, Not applicable: Information does not meet our definition of the corresponding OBIA criteria or the OBIA criteria are not applicable.
- Level 1, Not eligible: Insufficient detail for criteria evaluation or insufficient detail for high density specifically.
- Level 2, Eligible: Supporting information derived from habitat suitability models (non-peer reviewed),

expert opinion, regional expertise, or gray (non-peer reviewed) literature, but requires more justification.

• Level 3, Eligible: Supporting information derived from peer-reviewed analysis, habitat suitability models (peer-reviewed), or a survey specifically aimed at investigating and supporting the corresponding OBIA criteria provides adequate justification.

• Level 4, Eligible: Supporting information derived from peer-reviewed analysis, habitat suitability models (peer-reviewed), or a survey specifically aimed at investigating and supporting the corresponding OBIA criteria provides strong justification.

In cases where the subject matter expert did not provide enough support, we contacted them for additional supporting information and also conducted our own re-analysis and continued review of peer-reviewed literature to supplement nominations with little supporting documentation.

Areas that received a score of two or higher were eligible for further consideration, which resulted in 45 potential OBIAs. Further consideration of marine mammal hearing frequency sensitivity led us to screen out additional areas that qualified solely on the basis of their importance for mid- or high-frequency hearing specialists (e.g., dolphins, toothed whales, and beaked whales that hear best in the mid-frequency (150 Hertz to 160 kilohertz) and high-frequency (200 Hz to 180 kHz) ranges; low frequency hearing specialists, such as large baleen whales, hear best in the low-frequency range of 7 Hz to 22 kHz (Southall, 2007)), resulting in a list of 22 OBIA nominees for the Navy's consideration under a practicability standard.

The list of 22 OBIAs reflects the collective knowledge of not only the subject matter experts but of our own research, before and after their input, which consisted of reading: peer-reviewed scientific literature; reports prepared by natural resource agencies in other countries; reports from non-governmental organizations involved in marine conservation issues; and doctoral dissertations and master's theses.

Table 2 presents the geographic scope of the selected areas in the Proposed Rule. We also note that some OBIAs consist of multiple areas within a single OBIA. Seven of the eight OBIAs for South America, Australia, and the Indian Ocean are newly-designated areas for SURTASS LFA sonar compared to the previous two rulemakings.

TABLE 2—GEOGRAPHIC SCOPE OF THE 22 AREAS IN THE PROPOSED RULE

Marine area	Number selected
Antarctic Convergence Zone	1
Atlantic Ocean—Northwest	4
Atlantic Ocean—Southeast	1
Atlantic Ocean—Southwest	2
Caribbean Sea	1
Indian Ocean	2
Mediterranean Sea	1
Pacific Ocean—Central/Eastern Tropical	2
Pacific Ocean—Northeast	4
Pacific Ocean—Northwest	1
Pacific Ocean—Southeast	1
Pacific Ocean—Southwest	2
Total	22

The commenter's assertion that we did not conduct a systematic review of an oceanic basin or region is not accurate. Hoyt (2005) is recognized as a comprehensive global reference for identifying marine protected areas for whales, dolphins, and porpoises, and it is only logical to use it as a starting point for our identification of OBIAs before asking subject matter experts for additional recommendations. To date, 106 journal articles have cited Hoyt's 1st edition. Additionally, several marine and biological experts have positively reviewed Hoyt's efforts as authoritative, comprehensive, and up-to-date (e.g., Sylvia Earle; Edward O. Wilson; Carl Gustaf Lundin, Head, IUCN Global Marine and Polar Programme; William Rossiter, Director, Cetacean Society International; and one of the subject matter experts we consulted for the OBIA process). See *http://www.cetaceanhabitat.org/reviews.php* for a fuller list of reviews.

We compared the 1st and 2nd editions of Hoyt (2005 and 2011) to ensure that we did not overlook any additional areas for consideration. Appendix F of the 2012 FSEIS/SOEIS includes the results of our re-analysis of 367 additional areas within the Hoyt's (2011) 2nd Edition of Marine Protected Areas for Whales, Dolphins and Porpoises for this final rule.

Based on our evaluation of the 367 potential areas within the Hoyt's (2011) 2nd Edition of Marine Protected Areas for Whales, Dolphins and Porpoises (see Appendix F of the Navy's 2012 FSEIS/SOEIS), we have added one additional OBIA, the Abrolhos Bank in the southwest Atlantic Ocean which is a breeding/calving area for endangered humpback whales. The specified period of this OBIA would be effective August through November.

We also identified two additional areas for further consideration as OBIAs for marine mammals—an area within the Southeast Shoal, Grand Bank in the northwest Atlantic Ocean and an area within Dogger Bank in the North Sea. However, because the supporting information for these specific areas is limited, we and the Navy are continuing to gather information to determine whether these areas meet the OBIA criteria (see Mitigation section in this document).

Finally, this final regulation governing the take of marine mammals incidental to the Navy's SURTASS LFA sonar operations contains an adaptive management component. This provides a mechanism for NMFS and the Navy to modify (or add or delete) mitigation or monitoring measures, as appropriate, based on new information. We would add, modify or delete mitigation or monitoring measures in consultation with the Navy if doing so creates a reasonable likelihood of accomplishing the goals of mitigation and monitoring laid out in this final rule. This includes our continued analysis of the Southeast Shoal on the Grand Bank and an area within Dogger Bank in the North Sea within the first year of this rule.

Comment 13: One commenter suggested that the expert panel did not have a role in establishing the screening criteria (determined in advance by us) to select potential areas and following the submission of potential areas by the subject matter experts. They also suggested that we unilaterally weighed the scientific merits of each proposal and did not afford the expert panel an opportunity to participate in a group discussion or decision-making process.

Response: The commenter correctly noted that the expert panel did not have a role in either establishing the screening criteria for OBIAs or the final decision-making process. The Process Summary for Expert Input (Appendix D–3 in the 2012 FSEIS/SOEIS), Stage 1 (c) specifically states that ''NMFS will incorporate expert input, as appropriate, to produce the final OBIA nominees, which will be included for consideration in the Navy's 2009 [2011] draft supplemental environmental impact statement (DSEIS) for SURTASS LFA sonar.''

The purpose of the panel was to provide scientific information and make additional, scientifically supportable, OBIA recommendations based on the criteria and within the process we set up after careful consideration of the U.S. District Court's opinion and order granting in part plaintiffs' motion for preliminary injunction in *NRDC et al.* v. *Gutierrez et al.,* 2008 WL 360852 (N.D.Cal.).

Comment 14: NRDC and one other commenter suggested that the OBIA process failed to include habitat suitability or density modeling for marine mammals to confirm or, crucially, augment the information acquired from the subject matter experts.

Response: We recognize that baseline data on the distribution and behavior of marine animals are limited for certain areas of the world's oceans. During our OBIA designation process, we instructed the subject matter experts to use predictive habitat or density models in their review process if appropriate. Regarding our use of habitat suitability or density modeling, we have used results from habitat-based density modeling to supplement information provided by the subject matter experts. For example, we considered habitat-based density modeling from Barlow *et al.* (2009) in determining whether an area within the Southern California Bight, including Tanner and Cortes Banks, met our OBIA criteria as an area of blue whale concentration.

For offshore areas (those not associated with coastal areas or within a particular countries' exclusive economic zone) we agree that the data are lacking. In these data-poor scenarios there is debate about whether decision makers should use predictive models to forecast patterns in distribution or density in wide-ranging and heterogeneous areas (Praca *et al.,* 2009). Most models that relate cetacean distribution or population density to environmental factors are based on easily measured environmental proxies that substitute for the ultimate physical, biological, historical, or behavioral factors that interact to produce the observed patterns in cetacean habitat use. The relationship between a given proxy and the underlying ecological mechanism that it represents is likely to be region-specific and might vary among species in a given region. Furthermore, the functional relationship defined by a proxy is likely to depend upon the spatial and temporal scale of the ecological phenomenon that it represents. Therefore, we should use caution when extrapolating relationships between a proxy and cetacean distribution or density from one study area to another that differs in size or geographic location (Ferguson *et al.,* 2010).

Model validation (defined as comparing model fit or predictions to the data upon which the model was built or to a novel data set) is a critical component of cetacean-habitat modeling. If the model's fitted or predicted values are largely biased or imprecise, the model cannot reliably inform a question that it is designed to address. For scenarios in which cetacean distribution or density data are scarce or completely lacking, such as in open ocean areas outside of the United States, our ability to quantitatively or qualitatively validate cetacean-habitat model predictions may be limited or biased. In these situations, model validation must rely on multiple sources of scientific knowledge (including, but not limited to: Personal observations of distribution and density; known migration routes; ecosystem dynamics, such as inter-specific competition; seasonality and environmental regime shifts; live strandings; range expansions or contractions due to changes in population size; and historic whaling data) or indigenous/local knowledge (Ferguson *et al.,* 2010).

While predictive models can indicate regions with physical properties that might have relatively high probabilities of species occurrence, the actual abundance/density estimates for the region are often not known. Predictive models are only as good as the input data and the relationships between animal abundance/density and physical properties. Thus, they must have robust data to accurately predict relationships between animal abundance and/or density and physical properties. Outside of U.S. waters, some available models may not be robust enough to predict a species' true niche due to inter-specific and intra-specific dynamics and interactions with the physical environment.

Regarding the second point, we did not rely solely on the subject matter experts (see our responses to Comments 12 and 13). The subject matter experts' inputs were a crucial component of our selection processes; however, they were only one component. We as the action agency are responsible for the final selection of the SURTASS LFA sonar OBIAs. Because we independently evaluated the subject matter expert's input as well as available data/information for each recommended OBIA, we do not believe that effort bias on the part of the subject matter experts was a factor in our determinations.

In areas not designated as an OBIA (either because they did not meet the criteria or because there weren't sufficient data to support the designation), the regulation provides mitigation and monitoring measures that protect marine mammals nevertheless. The regulation requires the Navy to: (1) Restrict operations of SURTASS LFA sonar such that the sound field does not exceed 180 dB re: 1 μPa within 22 km (14 mi; 12 nm) of any coastline; (2) Conduct visual, passive acoustic, and active acoustic monitoring; and (3) Perform delays/shutdown protocols of active LFA sonar transmissions when monitoring detects a marine mammal effectively ensuring that marine mammals are not exposed to sound levels that exceed approximately 175 dB re: 1 μPa.

In addition to the Navy's required mitigation and monitoring protocols, their annual application to us for LOAs will use a sensitivity/risk assessment process to assess potential impacts to marine mammals (DoN, 2002; 2003; 2004; 2005; 2006). This process starts with the Navy reviewing the proposed mission areas and includes: (1) Data collection and analyses for marine mammal abundances/densities; (2) spatial/temporal analyses for potential geographic restrictions/migration corridors/habitat preferences; (3) mission area changes/refinements as required; (4) risk analysis/estimates; and (5) determination on the viability of a mission area based on potential marine mammal impacts. As with the 2002 and 2007 rules, the Navy will limit operation of SURTASS LFA sonar to ensure that no more than 12 percent of any marine mammal stock would be taken by Level B harassment annually, over the course of this five-year regulation. This annual per-stock cap applies regardless of the number of SURTASS LFA sonar vessels operating. The Navy will use the 12 percent cap to guide its mission planning and annual authorization applications to the greatest extent feasible considering national security tasking.

We and the Navy recognize that available information regarding marine areas will evolve over the next five years and these regulations include an adaptive management component to account for new data. This provides a mechanism for NMFS and the Navy to modify (or add or delete) mitigation or monitoring measures, as appropriate, based on new information. We would add, modify or delete mitigation or monitoring measures in consultation with the Navy if doing so creates a reasonable likelihood of accomplishing the goals of mitigation and monitoring laid out in this final rule. We and the Navy will meet annually (if deemed necessary by either agency) to discuss the monitoring reports, Navy research and development outcomes, current science, and to determine whether mitigation or monitoring modifications are appropriate.

Comment 15: The NRDC and one other commenter suggested that NMFS had established an unreasonably high bar for further consideration of OBIAS,

rather than a precautionary approach, even for areas where very little survey data are available. They also took issue with the proposed rule establishing only 21 discrete OBIAs within an area of operations that includes nearly all of the Atlantic, Pacific, and Indian Oceans and the Mediterranean Sea and suggested that we: did not advance most of the recommended areas to the Navy for discussion regardless of practicability; gave little weight to expert opinion; reviewed the first edition of Hoyt's (2005) Marine Protected Areas for Whales, Dolphins, and Porpoises and relied heavily upon the experts to supply additional information; and did not consider areas with rankings of ''two'' even if they featured baleen whale habitat.

Response: See our response to Comment 12 for a description of our evaluation process and pages 877–878 in the **Federal Register** notice of the proposed rule (77 FR 842; January 6, 2012). Table 2 (in Response to Comment 12) presents information on the geographic scope of the OBIAs. For this rulemaking, we have designated more than double the number of OBIAs in previous rulemakings for SURTASS LFA sonar, and more than 60 percent of these OBIAs are outside of U.S. waters.

Contrary to NRDC's assertion, we forwarded all of the subject matter experts' recommended areas (including those that did not qualify under the selection criteria) to the Navy for discussion. During each phase of the OBIA scoping process, the Navy had access to the following: Our initial screening matrix of 403 potential areas in the world; the potential 27 areas that we presented to the subject matter experts for review; the 73 potential OBIAs recommended by us, the experts and the Navy; the 45 areas resulting after we screened them for adequate scientific support (i.e., areas with a score of 2 or higher for at least one eligibility criteria); and the 22 areas that remained after screening for hearing specialization. The ''bar for further consideration'' the commenter refers to was our requirement that the description of the area recommended by an expert contain enough information for us to verify that it met our criteria. In cases where justification from subject matter experts was limited, we and the Navy conducted additional literature reviews to search for further support for those potential OBIA nominees. The practicability inquiry is immaterial if the area does not meet our standards for an OBIA in the first place.

In fact, based upon our continued re-analysis of the world's oceans, we have designated one additional OBIA (Abrolhos Bank in the southwest Atlantic Ocean) in addition to the 22 that we proposed.

We disagree that our process set an unreasonably high bar for further consideration and we recognize that many areas throughout the world's oceans have little data to support an OBIA designation at this time. The regulation's adaptive management provision allows us and the Navy to re-evaluate areas during the annual request for LOAs as new information becomes available. We will continue to conduct literature reviews and use robust habitat modeling results to support our reconsideration of these data-poor areas; and would consider modifying geographic restrictions as appropriate. In the meantime, the other protective measures in this regulation will be in effect.

Although habitat is a contributing factor to supporting our biological criteria for OBIAs, we did not base our recommendations on areas that solely feature baleen whale habitat. For areas based on habitat suitability models (non-peer reviewed), expert opinion, regional expertise, or gray literature (i.e., non-peer reviewed studies), we ranked these areas as a two (Eligible: Requires More Justification). Contrary to the commenter's assertion, under our classification methodology, we considered areas with a rank of two or higher as eligible for consideration as an OBIA for SURTASS LFA sonar operations. Thus, we included the subject matter expert's submitted areas within the initial screening for OBIA candidates. Many of these recommended areas did not meet our additional screening criterion for low-frequency hearing specialization.

The commenter's assertion that we did not conduct a systematic review of an oceanic basin or region is not accurate. Hoyt (2005) is recognized as a comprehensive global reference for identifying marine protected areas for whales, dolphins, and porpoises. It was a logical starting point for our identification of OBIAs. Later, we compared the 1st and 2nd editions of Hoyt (2005 and 2011) to ensure that we did not overlook any additional areas for consideration. We provide the results in Appendix F of the 2012 FSEIS/SOEIS. Based on that review, we have designated the following additional OBIA: Abrolhos Bank off the Brazilian Coast in the southwest Atlantic Ocean for humpback whales effective August through November.

Further, we and the Navy are continuing to gather current supporting information to continue to review the Southeast Shoal area, Grand Bank in the northwest Atlantic Ocean and Dogger Bank in the North Sea under the OBIA criteria. Because the Navy does not intend to operate within the northwest Atlantic Ocean or North Sea this year, we and the Navy will make a decision on this area as a potential OBIA within the first year of this rule under the adaptive management framework.

To reiterate, we incorporated expert input, as appropriate, to produce the proposed OBIAs (see Comment 12). The commenter's statement about ''heavy reliance on experts'' disregards the extensive analysis that we and the Navy conducted during the initial phase of the identification process as well as our continual efforts to update information on potential OBIAs during the rule making for this regulation.

Comment 16: The NRDC stated that for at least one major area that remained, we failed to consider more limited forms of mitigation when a complete exclusion was deemed impracticable, a failure that led to a complete lack of additional protection for the Southern California Bight.

Response: We designate OBIAs to protect marine mammals. OBIAs are not intended to protect areas per se. Also, the comment ignores the required mitigation and monitoring measures for any Navy SURTASS LFA sonar activities within the area, which will provide protection for marine mammals.

We note that within the Southern California Bight, we require the Navy to limit the SURTASS LFA sonar sound field so that it does not exceed 180 dB re: 1 μPa within 22 km (14 mi; 12 nm) of any coastline, including offshore islands such as San Clemente and San Nicolas Islands, and the Channel Islands National Marine Sanctuary. This would include additional protections for smaller areas within the Southern California Bight such as the San Clemente and San Nicholas Islands. Also, the Navy will restrict SURTASS LFA sonar operations in the vicinity of known recreational and commercial dive sites to ensure that the sound field at such sites does not exceed received levels of 145 dB re: 1 μPa. Within the Southern California Bight, the Navy has designated Tanner and Cortes Banks and the Channel Islands National Marine Sanctuary, as recreational dive sites.

Since the publication of the proposed rule, we have consulted with the Navy on the practicability of finding other means of limiting SURTASS LFA sonar activities within the Southern California Bight to reduce adverse effects to marine mammals without impacting operations. The Navy is not currently planning to use the SURTASS LFA sonar system in

the Southern California Bight. If the Navy were to plan use of SURTASS LFA sonar per the 2012 FSEIS/SOEIS, the Navy would include the details of that plan in their LOA application for the applicable year. At that time, we and the Navy would discuss what, if any, other measures are appropriate in light of the projected use of SURTASS LFA sonar and relevant current information available for the species potentially affected by that use.

Comment 17: The NRDC stated: ''The result of all this is to establish only 21 offshore biologically important areas—21 areas within an MMPA application that encompasses 70–75 percent of the world's oceans, including almost the entirety of the Atlantic, Pacific, and Indian Oceans and the Mediterranean Sea. In its 2002, 2003, and 2008 opinions on SURTASS LFA, the District Court repeatedly emphasized the importance of geographic mitigation to reduce impacts from the LFA system, the need to ensure meaningful inclusion of OBIAs throughout the LFA operating area, and the agencies' obligation to affirmatively identify and protect marine mammal habitat. The agencies' draft approach to designating OBIAs—which leaves most of the Navy's operating area unrepresented and shifts much of the burden for justifying individual areas to experts—does not satisfy the requirements of NEPA and MMPA or the Court's concerns.

Response: Under the regulation, the total area that would be available for SURTASS LFA sonar operations over the five-year period is about 70–75 percent of the world's oceans. This in no way equates to SURTASS LFA sonar operations affecting even close to 70–75 percent of the world's ocean areas during any given annual period for the LOAs. Based on its annual projected operational needs, the Navy will identify the particular geographic areas in which it intends to operate its four SURTASS LFA sonar vessels. In doing so, the Navy considers marine mammal habitats, seasonal activities, and behavioral activities during the process of determining potential mission areas and, to the greatest extent feasible considering national security tasking, avoids planning and conducting SURTASS LFA sonar operations in areas of known high marine animal densities (i.e., hot spots). Also, in performing mission planning for its annual LOA applications the Navy would limit operation of SURTASS LFA sonar to ensure that no more that 12 percent of any marine mammal stock would be taken by Level B harassment annually, over the course of this rule.

We believe that our OBIA analysis was comprehensive (see Comments 12 and 14). We and the Navy conducted separate bibliographic research to look for OBIA candidates in all potential operating areas, even before involving the subject matter experts in our process. And in all cases, we not only applied biologically-based criteria but also required a minimum level of supporting scientific documentation to designate an area as an OBIA.

In designing the OBIA selection process for this rulemaking, we carefully considered and took into account the articulated concerns of the U.S. district court and believe the process addresses those concerns. Recognizing that many areas throughout the world's oceans currently have few data to support an OBIA designation at this time, we and the Navy will continue to conduct literature reviews under the adaptive management provision of this regulation.

Comment 18: The NRDC stated: ''Offshore biologically important areas (OBIAs) lie at the core of the proposed rule, representing the sole difference between the new preferred alternative and the one selected by the agencies during the 2007 SEIS and rulemaking processes, and ultimately rejected by the Court. DSEIS at 2–11 to 2–13. Obtaining sufficient data on potential OBIAs throughout the Navy's entire proposed operating area is therefore critical. NRDC v. Gutierrez, Case No. 07–4771–EDL, 2008 WL 360852 at *7 (N.D. Cal. 2008) (''* * * having chosen not to confine operations to relatively sterile areas of the ocean and seasons of the year and to reduce the coastal exclusion zone, the Secretary must make a serious effort to investigate plausible candidates for OBIAs'').''

Response: See Comments 12 and 14. We conducted a detailed, global evaluation for OBIA candidates. Our responsibility under 16 U.S.C. 1371(a)(5)(A) and our implementing regulations is to prescribe the means of effecting the least practicable adverse impact, which involves consideration of impacts on military readiness training and operations. To that end, we, in coordination with the Navy, developed a suite of mitigation measures for this and previous rulemakings. OBIAs are an important component, but they are by no means the only one or the ''core'' mitigation measure. The U.S. district court, in litigation over our previous rule, took issue with our process for identifying and designating OBIAs. We have remedied the identified deficiency.

Comment 19: The NRDC stated that despite the lack of available density information for most locations and regions, we did not provide density modeling for any area beyond the United States. They also advocated the use of existing habitat suitability and/or density models, such as the one licensed by St. Andrews University's Sea Mammal Research Unit (SMRU).

Response: As the NRDC letter notes, the Navy, under license agreements with St. Andrews University's Sea Mammal Research Unit and Dr. Kristin Kaschner, developed a preliminary database of marine mammal density estimations for the Navy's areas of responsibility that are the result of habitat suitability predictive modeling. For their environmental compliance efforts for mid-frequency active sonar training, the Navy uses a hierarchy of desired methods to estimate marine mammal density in the areas where they plan to train. The St. Andrews/Kaschner methodology is the least preferred method (used only when nothing else is available), with habitat-based density estimates and stratified density estimates being the first and second method of choice. However, for helping to estimate density, it is better than simply spreading an abundance estimate across the entire ocean since it considers species extent and attempts to characterize relative occurrence. As noted in our response to Comment 14, methods that extrapolate significantly past the areas where marine mammal surveys have actually been conducted and into ecologically different regions are far less likely to be accurate. While the Navy's groundtruthing exercises have shown the model to be relatively accurate for predicting most Atlantic species within a few hundred miles of the Atlantic Coast, they found the model inaccurate off the Pacific Coast and have not been able to validate the model in any other areas.

Density estimates are necessary for the Navy to estimate take. The St. Andrews estimates serve as the least preferred option for calculating take for the Navy's mid-frequency active sonar training activities. However, for the reasons noted above, this method for estimating density does not produce estimates that are considered robust or accurate enough to support the designation of OBIAs under our criteria and requirements.

Comment 20: The NRDC and several other commenters recommended that we consider the approach of using proxies such as: persistent oceanographic features (e.g., high primary productivity and nutrient enrichment processes); relative densities of non-marine mammal species (i.e., apex predators and fish); all continental shelf waters and waters 100 km (62 mi)

seaward of the continental slope; waters within 100 km (62 mi) of all islands and seamounts that rise within 500 meters (1,640 feet) to identify marine mammal hotspots or supplement our OBIA analysis in data-poor regions.

Response: OBIAs are but one component of a suite of required mitigation and related monitoring measures designed to effect the least practicable adverse impact on marine mammals. The regulation prescribes mitigation and monitoring measures for SURTASS LFA sonar operations in areas that have persistent oceanographic features and seamounts and island chains that did not meet our OBIA criteria or fall within the 22 km (14 mi; 12 nm) coastal exclusion zone. The Navy is to delay/shutdown active SURTASS LFA sonar transmissions when they detect a marine mammal within the 2-km (1.2-mi; 1.1-nm) LFA sonar mitigation and buffer zones around the vessel by visual, passive acoustic, and active acoustic monitoring protocols, effectively ensuring that marine mammals are not exposed to sound levels that exceed 175 dB re: 1 µPa.

Our process for selecting, assessing, and designating OBIAs for SURTASS LFA sonar relies on three specific screening criteria for biological importance for marine mammals. These include areas with: (a) High densities of marine mammals; or (b) known/defined breeding/calving grounds, foraging grounds, migration routes; or (c) small, distinct populations of marine mammals with limited distributions. Additionally, the area must be 22 km (14 mi; 12 nm) seaward of any coastline. The commenters' recommendations do not meet the criteria we established.

That said, we recognize that the ecological processes recommended by the commenters support cetacean habitats and have considered their guidance in reviewing and designating OBIAs. Information regarding data poor areas is likely to evolve over the five-year course of the final rule and beyond, and NMFS will consider new information to continue identifying OBIAs for SURTASS LFA sonar operations. Under our adaptive management framework, we will consider these factors along with our selection criteria to consider future modifications to the OBIA list. This provides a mechanism for NMFS and the Navy to modify (or add or delete) mitigation or monitoring measures, as appropriate, based on new information. We would add, modify or delete mitigation or monitoring measures in consultation with the Navy if doing so creates a reasonable likelihood of accomplishing the goals of mitigation and monitoring laid out in this final rule.

As a part of our global OBIA selection process, we reviewed continental shelf and slope areas and have designated OBIAs located on the northeast U.S. continental, northwest U.S. continental, Patagonian, Bahamian, Madagascar, east Brazilian, the northeast Australian, the southeast Australian, the Sakhalin Island, and the southeast U.S. continental shelves or slopes.

In our review of areas with enhanced productivity associated with seamounts, we have designated seven OBIAs which meet the commenters' recommendations. These areas include the Silver and Navidad Banks and the Abrolhos Bank in the Atlantic Ocean; the Costa Rica Dome; the Prairie, Barkley, and Nitnat Canyons; Davidson Seamount within the Monterey Bay National Marine Sanctuary; and Penguin Bank in the Pacific Ocean; and Walters Shoal in the Indian Ocean.

Finally, over half of the OBIAs are located in areas categorized as Class I, highly productive or Class II, moderately productive ecosystems based on SeaWiFS global primary productivity estimates (NOAA, 2012).

In areas that are not designated an OBIA, the standard operational mitigation and monitoring measures will apply wherever the Navy operates SURTASS LFA sonar. These required mitigation and monitoring measures and delay/shutdown protocols will ensure that marine mammals are not exposed to sound levels that exceed approximately 175 dB re: 1 µPa.

Comment 21: The NRDC recommended the Transition Zone Chlorophyll Front north of the Hawaiian Islands as an example likely to represent important habitat for cetacean species based upon persistent oceanographic features and relative densities of non-marine mammal species. They also stated that the size of some of these areas is not in itself a reasonable bar against designating them as an OBIA.

Response: See response to Comment 20.

With regard to the Transition Zone Chlorophyll Front north of the Hawaiian Islands, several studies have reported that northern fur seals, Dall's porpoises, northern right whale dolphins, and Pacific white-sided dolphins occur as bycatch in squid driftnets in the region (Baba *et al.,* 1993; Buckland *et al.,* 1993; Yatsu *et al.,* 1993). Applying our OBIA criteria, we found no supporting information that these species are present in high densities or that they use this area in concentrated numbers for foraging, breeding/calving, or migration. Nor are these species a small distinct population within the area. Furthermore, these species are not categorized as low frequency hearing specialists. At this time, the data are not sufficient to consider the Transition Zone Chlorophyll Front as an OBIA.

With regards to the second point related to the size of a potential OBIA, see our Response to Comment 17. We note that several of the OBIAs including the Costa Rica Dome (year-round restriction), Georges Bank (year-round), and the Antarctic Convergence Zone (October through March), and the Bonney Upwelling (December through May), have persistent oceanographic features and are quite large in size.

Comment 22: The NRDC stated: ''the DSEIS explicitly rejects Challenger Bank, an area that has repeatedly been shown to seasonally host humpback whales on their northward migration, on the grounds that ''the available sighting data and information are insufficient to clearly demonstrate that the Challenger Bank individually is the most significant biologically important area in Bermudian waters for humpback whales DSEIS at D–81.''

Response: DSEIS subchapter 4.5.2.3 on the Challenger Bank (Bermuda) OBIA did not adequately describe the justifications for excluding this area as an OBIA. The Navy has revised this section of the 2012 FSEIS/SOEIS based upon re-analysis of this area.

Briefly, Challenger Bank did not qualify under the foraging criterion for humpback whales. Also, the waters off the Bank did not qualify as a defined migration route even though there are anecdotal observations of whales transiting near the Bank. As noted in our original analysis of the area, Stone *et al.* (1987) hypothesized that humpback whales may feed in Bermudian waters and suggested the possibility that humpback whales feed at Bermuda while transiting northward. Other peer-reviewed articles (Clapham and Mattila, 1990; Baraff *et al.,* 1991) repeated Stone *et al.'s* (1987) hypothesis but did not provide additional specific and sufficient scientific justification to support our selection of this area as an OBIA at this time.

Comment 23: The NRDC stated: ''The proposed Dogger Bank OBIA was shown in a survey of the German exclusive economic zone to contain ''fairly high'' densities of harbor porpoises, is associated with several oceanographic features relevant to marine mammal distribution (e.g., a submerged sandbar), and has been proposed by the German government as an MPA, yet is unaccountably accorded a ''one'' on NMFS' scale. DSEIS at D–286. NMFS

should review its low ranking of areas such as Dogger Bank.''

Response: We have re-analyzed our ranking for the Dogger Bank area for harbor porpoises. To clarify, this is an area that we independently evaluated and considered as a potential OBIA for harbor porpoises. Further consideration of marine mammal hearing frequency sensitivity led us to screen out Dogger Bank as an OBIA for SURTASS LFA sonar because harbor porpoises are mid-frequency hearing specialists.

Germany's Federal Agency for Nature Conservation conducted aerial surveys within the German exclusive economic zone and 12 nautical mile zone to assess proposed Sites of Community Importance under the European Union Habitats Directive. They reported that the north-east survey area of the Dogger Bank Special Area of Concern (SAC), off the North Friesian islands of Sylt and Amrum, showed the highest mean summer densities (2.75 individuals per square kilometer (indiv./km^2) in 2002 and 3.7 indiv./km^2) of harbor porpoises (Gilles, Herr, Lehnert, Scheidat, & Siebert, 2008). These areas fall under this regulation's coastal standoff restriction that requires the Navy to restrict operation of SURTASS LFA sonar such that the sound field does not exceed 180 dB re: 1 µPa within 22 km (14 mi; 12 nm) of any coastline and as a result we did not consider these areas for OBIA status.

In 2010, the Joint Nature Conservation Committee (JNCC) re-evaluated the Dogger Bank SAC according to the European Habitats Directive selection criteria and guiding principles in response to scientific questions on the site's justification for harbor porpoises. They concluded that the data indicated that there is no difference in occurrence of harbor porpoise within the Dogger Bank SAC (identified for its sandbank habitat) compared to outside the SAC (JNCC, 2010). They also concluded that there is not ''good population density (in relation to neighboring areas) and that the Dogger Bank SAC cannot be considered a ''clearly identifiable area essential to the life and reproduction'' of harbor porpoise, and that therefore the species should not be a qualifying feature for the site (JNCC, 2010).

Based on the best available information, we arrived at similar conclusions that the area is not eligible as an OBIA for harbor porpoises under the high density criterion at this time. Moreover, there is not enough information at this time to support designation of this area as an OBIA for low-frequency hearing specialists. We will continue to monitor and re-evaluate this area under the adaptive management framework as researchers complete additional surveys on Dogger Bank within the next few years. We and the Navy will make a decision before issuing the second annual LOAs regarding whether this area meets the OBIA criteria and, if so, can be practicably implemented

Comment 24: The NRDC stated: ''Given the extent of the area available for LFA operations, the lack of comparative density data in most parts of the world, and NMFS' express reliance on experts, it is reasonable for the agencies to consider the practicability of recommended OBIAs that score a ''one'' or above on NMFS' scale.''

Response: See Comment 12. The description of the area should contain enough information for us to verify that it met our defining criteria, because in our view it is not appropriate to designate OBIAs without sufficient scientific justification. Also, we discuss the classification methodology for all OBIA rankings in the 2012 FSEIS/SOEIS subchapter 4.5.2 and pages D–104 and D–225.

Comment 25: The NRDC stated: ''Yet NMFS has effectively shifted the burden of identifying OBIA to its volunteer experts, appearing to have screened out areas where its experts did not supply ''sufficient'' information even though additional information might be available. For the Gulf of Mexico, where NMFS' expert recommended the inclusion of slope waters between the 200 m and 1000 m depth contours, the agency merely listed the ''background'' information that the expert provided, and without explanation gave the area two disqualifying ''ones'' for ''high density'' and ''foraging'' and ''zeroes'' in every other habitat category. SDEIS at D–290. Even supposing arguendo that these rankings were reasonable, the agency apparently did not compile other information that might support the recommendation, even though such information was readily available, nor did it consider on its own any alternative areas in the Gulf, including parts of the recommended OBIA, that might have additional support. Cf., e.g., Appendix B to this letter. Instead, NMFS appears to have relied entirely on its expert to define the OBIA boundary and justify it. That form of burden-shifting is not acceptable.''

Response: See Comments 12 and 15. We, along with the Navy, again reviewed the latest and best available scientific information and could not locate adequate information to support designation of an OBIA for SURTASS LFA sonar between the 200- and 1,000-m depth contours in the Gulf of Mexico (see Appendix F of the 2012 FSEIS/SOEIS). At this time, we believe that assigning a rank of one (Not Eligible: Insufficient Information) for the 200- and 1,000-m (656 and 3,281 feet) depth contours in the Gulf of Mexico is reasonable and based on the best available science.

Several papers noted that most marine mammal species had a wide spatial distribution along the slope as well as a wide temporal distribution (Mullin *et al.,* 1991; Davis *et al.,* 1998; Baumgartner *et al.,* 2001). Also, the inter-annual variability of the Mississippi River discharge itself may also have significant impact on sperm whale distributions along the 1,000-m isobath between Mississippi Canyon and De Soto Canyon (Jochens *et al.,* 2008).

The basic unit of sperm whale social organization is the breeding or mixed herd consisting of mature females, juveniles of both sexes, and calves. Studies have reported aggregations of female and mixed juvenile/calf groups commonly sighted around the Mississippi Canyon in summer 2004 (Thomsen *et al.,* 2011). Conversely, in summer 2005, Jochens *et al.* (2008) observed only lone/bachelor males around the Mississippi Canyon and did not observe any mixed herds (Thomsen, *et al.,* 2011). Regarding the inter-annual differences in sighting between the two surveys, Jochens *et al.* (2008) noted that they observed no members of the mixed groups ''core population'', which could be caused by changing oceanographic conditions between the two surveys as the Mississippi River's 2005 discharge level was 59 percent of the average summer monthly outflow.

Until such time that more robust information becomes available that supports the biological criteria (i.e., marine mammals present in high densities or an area on the slope with known/defined breeding/calving grounds, foraging grounds, migration routes, or an area with small, distinct populations of marine mammals with limited distributions) on the continental slope of the northern Gulf of Mexico, we do not designate this area as an OBIA for SURTASS LFA sonar operations. However, within our adaptive management framework, we will consider new information during the five-year period of this regulation to consider future modifications to the OBIA list. This provides a mechanism for NMFS and the Navy to modify (or add or delete) mitigation or monitoring measures, as appropriate, based on new information. We would add, modify or delete mitigation or monitoring measures in consultation with the Navy

if doing so creates a reasonable likelihood of accomplishing the goals of mitigation and monitoring laid out in this final rule.

If SURTASS LFA sonar operations were to occur on the continental slope of the northern Gulf of Mexico, marine mammals present in the operational area are protected by the Navy's mitigation protocols, including: (1) Restricting operations of SURTASS LFA sonar such that the sound field does not exceed 180 dB re: 1 µPa within 22 km (14 mi; 12 nm) of any coastline; (2) Conducting visual, passive acoustic, and active acoustic monitoring; (3) Performing delays/shutdown protocols of active LFA sonar transmissions when monitoring detects a marine mammal, which effectively ensures marine mammals will not be exposed to sound pressure levels greater than approximately 175 dB; and (4) Performing mission planning for annual Letters of Authorization applications.

Comment 26: The NRDC stated: ''The agency incorrectly assumes that certain established or proposed MPAs and recommended OBIAs are located entirely within 12 nm of shore. For example, the Papahanaumokuakea Marine National Monument was apparently excluded early in the OBIA process on the assumption that it does not extend seaward of that distance, which is incorrect.''

Response: We concur that the Papahanaumokuakea (Northwestern Hawaiian Islands) Marine National Monument boundaries extend seaward of the 22-km (12-nm) coastal standoff zone. However, areas noted for breeding or wintering of low-frequency hearing specialists are within the coastal standoff zone and are not located outside of any portion of the Monument seaward of the coastal standoff zone. Thus, there is not enough information to support designation around any islands outside the 22 km (14 mi; 12 nm) coastal standoff zone at this time.

Johnston *et al.* (2007) modeled the extent and spatial location of humpback whale wintering habitat across the Hawaiian Archipelago, using bathymetry and averaged sea surface temperature data. Using the data, they produced polygons identifying areas shallower than 200 m and warmer than 21.1°C as potential wintering habitat. To ground-truth their data, they also conducted a pilot survey across the Northwest Hawaiian Islands and reported nine sightings of humpback whales (n = 19) during the 15-day cruise, including three groups with small calves or exhibiting breeding behaviors. All of the sightings occurred in warm, shallow water at or within their predicted habitat regions. They detected humpback whales on the shallow banks surrounding Nihoa Island, Necker Island, Gardner Pinnacles, Maro Reef, and Lisianski Island (Johnston *et al.,* 2007). Based on the best available information, this area that extends seaward of the 22-km (14-mi; 12-nm) coastal standoff zone does not qualify as an OBIA for SURTASS LFA sonar.

Comment 27: The NRDC stated that we did not consider the following areas in our OBIA analysis: (1) Areas of Increased Awareness designated by the Navy in the Atlantic Fleet Active Sonar Training EIS; (2) areas identified in Hoyt (2011); (3) areas referenced in the previous LFA sonar rulemakings; (4) important habitats in the Northwest Pacific Ocean and in the Gulf of Mexico; (5) areas off the main Hawaiian Islands; (6) areas in southeast Alaska that the SPLASH project identified as seasonal habitat or migration corridors for humpback whales; and (7) the North Atlantic right whale migration corridor.

Response: Following is a summary of our consideration of the areas identified by the commenter. See responses to comments in Chapter 7 of the Navy's 2012 FSEIS/SOEIS for detailed information on our analyses.

- Areas of Increased Awareness: The commenter's assertion is inaccurate. First, several of the Areas of Increased Awareness are protected by the coastal standoff restriction where we require the Navy to limit the SURTASS LFA sonar sound field so that it does not exceed 180 dB re: 1 µPa within 22 km (14 mi; 12 nm) of any coastline. Second, several of these areas are within OBIAs 1, 3, and 4, which include the North Atlantic right whale critical habitat areas as well as areas in the Gulf of Maine, the Great South Channel, Georges Bank, and the southeastern U.S. right whale seasonal habitat.
- Hoyt (2011): We compared the 1st and 2nd editions of Hoyt (2005 and 2011) to ensure that we have not overlooked any additional areas for consideration. The results are in Appendix F of the Navy's 2012 FSEIS/SOEIS. Based on that review and after discussion with the Navy, we have designated an additional OBIA: the Abrolhos Bank off the Brazilian Coast in the Southwest Atlantic Ocean.
- Habitat in the Northwest Pacific Ocean: Even though there is evidence of baleen whale activity in waters around the Emperor Seamount Chain, Oyashio/Kuroshio Currents, Ogasawara and Mariana Archipelagos, and Shatsky Rise, they do not meet the selection criteria for an OBIA as we did not find scientific evidence that these whales occur in these waters in densities higher than any other similar location or use these areas in concentrated numbers for breeding/calving, foraging, or migration. See responses to comments in Chapter 7 of the Navy's 2012 FSEIS/SOEIS for detailed information on our analyses.
- Gulf of Mexico: See Comment 25.
- Hawaiian Islands: See Comment 26.
- Southeast Alaska: The commenters have mischaracterized what the SPLASH report states regarding migration corridors for humpback whales in the North Pacific Ocean. The SPLASH report neither delineates nor depicts migration corridors, but instead describes and depicts movements of individually tagged whales between the winter and summer grounds (Calambokidis *et al.,* 2008). The SPLASH report details the complexity of humpback whale movements in the North Pacific, which encompass much of the North Pacific Ocean between the Hawaiian and Japanese Islands and the Gulf of Alaska and waters of northeastern Russia. We did not exclude this area from the selection process. For example, we considered Fairweather Grounds, although not specifically mentioned in the SPLASH report (Calambokidis *et al.,* 2008), but ultimately did not select the area as a potential OBIA for foraging in southeastern Alaska waters based on a lack of supporting information. Additionally, we also reviewed the Glacier Bay National Park and Preserve, southeastern Alaska.
- North Atlantic Right Whale: The commenter notes the existence of ''the North Atlantic right whale migration corridor'' in waters less than 200 meters in depth off the U.S. Atlantic coast. The available sighting data, collected over several decades, are insufficient to represent a specific migration corridor for the North Atlantic right whale off the U.S. Atlantic coast or elsewhere in the North Atlantic Ocean (Kenney, 2012 personal communication). The winter locations and movements of much of the North Atlantic right whale population are currently unknown (Waring, *et al.,* 2010).
- Areas Referenced in Previous LFA sonar Rules: We have re-evaluated all areas referenced in the previous LFA sonar rulemakings. For additional information see the 2012 FSEIS/SOEIS, Appendices D and F and the Navy's response to public comments.

Monitoring

Comment 28: The Commission recommends that we issue the final rule, provided that we require the Navy to monitor for 60 minutes before resuming SURTASS LFA sonar transmissions

after a delay or suspension related to the sighting of a marine mammal in the LFA sonar mitigation or buffer zones unless the Navy observes the animal leaving those zones.

Response: In this rulemaking, as in our past regulations for SURTASS LFA sonar, we require the Navy to immediately delay or suspend SURTASS LFA sonar transmissions if they detect a marine mammal within or about to enter the SURTASS LFA sonar mitigation and buffer zones. During the delay/suspension, the Navy would still operate the HF/M3 active sonar system to monitor for the presence of marine mammals as well as conducting visual and passive acoustic monitoring. The Navy may resume operations no sooner than 15 minutes after:

(1) All marine mammals have left the SURTASS LFA sonar mitigation and buffer zones; and

(2) Visual, passive acoustic, and active acoustic monitoring have determined that there are no further detections of marine mammals within the SURTASS LFA sonar mitigation and buffer zones.

We believe that requiring the extension of the post-contact monitoring for an additional 45 minutes is not warranted due to the proven effectiveness of the HF/M3 active sonar system. The HF/M3 active sonar system provides 24-hour, all-weather, active acoustic monitoring of the 180-dB SURTASS LFA sonar mitigation zone and the 1-km (0.62 mi; 0.54 nm) buffer zone around the LFA sonar mitigation zone. In all, the Navy can effectively monitor for marine mammals for approximately 2-km (1.2 mi; 1.1 nm) around the vessel. The HF/M3 active sonar system's effective detection probability for marine mammals within the SURTASS LFA sonar mitigation zone approaches 100 percent, based on multiple pings. Combined with the passive acoustic (estimated 25 percent detection probability) and visual monitoring (estimated nine percent detection probability) requirements, all three systems together have an effective detection probability of at least 99 percent at 1 km (0.62 mi; 0.54 nm) from the vessel. Based upon our review of nine years of data from monitoring reports on previous SURTASS LFA sonar activities (i.e., the best available information), we consider the likelihood of the Navy not detecting a marine mammal within the SURTASS LFA sonar mitigation zone to be extremely small (less than one percent).

The Navy has evaluated the effectiveness of the monitoring measures in the 2007 Final Comprehensive Report (DoN, 2007) and the 2011 Final Comprehensive Report (DoN, 2011) submitted under 50 CFR 216.186(c). These reports are available to the public (see **ADDRESSES**).

Comment 29: The Commission recommends that we issue the final rule, provided that we require the Navy to monitor (i.e., visually, passive and active acoustically) for a minimum of 30 minutes after SURTASS LFA sonar transmissions cease, using visual observation (if during daylight hours as defined in the proposed regulations), passive acoustics, and the active sonar system.

Response: In this rulemaking, as in our past regulations for SURTASS LFA sonar, we require the Navy to continue the three-part monitoring program for at least 15 minutes after completing a SURTASS LFA sonar transmission exercise. We decline to extend the post-operational monitoring by an additional 15 minutes.

Per the MMPA, our prescription of the Navy's mitigation measures reflects a careful balancing of the likely benefit of any particular measure for marine mammals with the likely effect of that measure on personnel safety, practicality of implementation, and impact on the effectiveness of the military readiness activity. Over the last nine years, there have been few marine mammal detections, either by visual observation, passive acoustic or active acoustic monitoring, during the 15-minute post-transmission period. Imposing additional data collection requirements, such as extending post-transmission monitoring to 30 minutes, would not meaningfully increase our knowledge of the species or SURTASS LFA sonar impacts to warrant the additional time and cost expenditures. Moreover, the Navy must balance the small benefits gained by obtaining this incremental amount of additional data against the impact on fleet operations that the additional delay would necessarily entail. Waiting an additional 15 minutes before recovering the towed SURTASS horizontal line array and the SURTASS LFA sonar vertical line array would delay the ship's ability to depart the area at the normal transiting speed of 10 knots (kts) (11.5 miles per hour (mph); 18.5 km per hour (kph)) (rather than the slower operating speed with deployed arrays of three kts (3.5 mph; 5.5 kph).

This regulation also requires the Navy to conduct visual monitoring from the ship's bridge during daylight hours (30 minutes before sunrise and until 30 minutes before sunset) for marine mammals during active SURTASS LFA sonar operations. Although not required by the regulation, the ship's lookouts are monitoring the area at all times, including during array retrieval and non-transmission periods. The Navy will report marine mammal detections noted by the lookouts during non-transmission periods in the quarterly, annual, and five-year comprehensive reports.

Research

Comment 30: One commenter noted that the research conducted by both environmental advocacy groups and government entities such as the Navy were useful; encouraged all parties to maintain reasonable efforts and resources reserved for continued research; and asked that we should remain vigilant and responsive to the results.

Response: We agree and require the Navy to conduct monitoring and research that will result in increased knowledge of the species, the level of taking, or impacts on populations of marine mammals that we expect to be present during SURTASS LFA sonar operations. Also, this final regulation governing the take of marine mammals incidental to Navy's SURTASS LFA sonar operations contains an adaptive management component. This provides a mechanism for NMFS and the Navy to modify (or add or delete) mitigation or monitoring measures, as appropriate, based on new information. We would add, modify or delete mitigation or monitoring measures in consultation with the Navy if doing so creates a reasonable likelihood of accomplishing the goals of mitigation and monitoring laid out in this final rule. We and the Navy will meet annually (if deemed necessary by either agency) to discuss the monitoring reports, Navy research and development outcomes, current science, and determine whether mitigation or monitoring modifications are appropriate.

NEPA Concerns

Comment 31: The NRDC stated that the proposed rule fails to consider single dual criteria alternative for coastal protection, despite the Court's recognition of the importance of the continental shelf.

Response: In light of the comprehensive efforts to identify and analyze areas of biological importance outside of the 22 km (14 mi; 12 nm) coastal standoff zone and the need for broad operational flexibility, the Navy considered the dual criteria for coastal exclusion zones within the overall OBIA analysis process (see Subchapter 4.5.6 of the Navy's 2012 FSEIS/SOEIS). Subchapter 4.8.1 (Alternatives Previously Considered) in the Navy's

2012 FSEIS/SOEIS and subchapter 2.6.4 in the Navy's 2007 FEIS provide a summary of the results of the detailed analysis of the differences in potential impacts if the coastal standoff were increased from 22 km (14 mi; 12 nm) to 46 km (29 mi; 25 nm).

Of the 21 OBIAs in the proposed rule, 17 included continental shelf/slope areas and similar coastal areas. We reviewed the continental shelf area in the northwest Atlantic Ocean (with input from the Navy and subject matter experts) and determined that designating the entire eastern seaboard out to the 200-m (656-ft) isobath did not meet the criteria for a single OBIA. However, several scientifically-supported areas over the continental shelf met the criteria for an OBIA. They are:

- Georges Bank (OBIA #1);
- Roseway Basin Right Whale Conservation Area (OBIA #2);
- Great South Channel (OBIA #3) including North Atlantic right whale critical habitat, Stellwagen Bank National Marine Sanctuary, and areas within the Gulf of Maine; and
- Southeastern U.S. Right Whale Seasonal Habitat (North Atlantic right whale critical habitat) (OBIA #4).

In addition to our review of the continental shelf area in the northwest Atlantic Ocean, the final rule designates OBIAs in the northwest U.S. continental, Patagonian, Bahamian, Madagascar, east Brazilian, the northeast Australian, the southeast Australian, and Sakhalin Island shelves or slopes.

Comment 32: In October 2011, the NRDC requested a meet and confer with the parties to the 2008 SURTASS LFA sonar litigation. Their comment on our proposed rule states that we did not make any modifications to the proposed rule based on their concerns with the proposed mitigation measures (as noted in the Navy's 2011 Draft Supplemental Environmental Impact Statement/ Supplemental Overseas Environmental Impact Statement) nor was there an effort to meet and confer. They further state that they seek mitigation that conservatively identifies and protects important habitat, reflects the global scope of the Navy's action, and addresses the Court's concerns.

Response: See our Responses to Comments 12, 14, 17 and 20. The ''meet-and-confer'' provision contained in the 2008 Stipulated Settlement Agreement Order (Civ. Action No. 07–4771–EDL) relates to altering the agreed-upon operating areas contained in that specific agreement for the five-year period of the 2007 Rule.

Comment 33: The NRDC states: ''The fundamental purpose of an EIS is to compel decision-makers to take a ''hard look'' at a particular action—both at the environmental impacts it will have and at the alternatives and mitigation measures available to reduce those impacts—before a decision to proceed is made 40 CFR 1500.1(b), 1502.1; *Baltimore Gas & Electric* v. *NRDC,* 462 U.S. 87, 97 (1983). To that end, NEPA requires agencies to make every attempt to obtain and disclose data necessary to analyze environmental effects and make a reasoned choice among alternatives. See 40 CFR 1502.22(a). The simple assertion that ''no information exists'' does not suffice; unless the costs of securing the information are exorbitant or the means to obtain it are not known, NEPA requires that it be obtained. Id.; see, e.g., *Cabinet Resource Group* v. *U.S. Fish and Wildlife Service,* 465 F.Supp.2d 1067, 1100 (D. Mont. 2006). Additionally, the alternatives analysis to support NMFS' rulemaking requires a full consideration of available mitigation measures.

Response: See the Navy's response to Comment NRDC–04 in the Navy's 2012 FSEIS/SOEIS and our Response to Comment 20.

With regard to taking a hard look at data poor areas, the adaptive management component of our regulation provides a mechanism for us and the Navy to modify (or add or delete) mitigation or monitoring measures, as appropriate, based on new information. We would add, modify or delete mitigation or monitoring measures in consultation with the Navy if doing so creates a reasonable likelihood of accomplishing the goals of mitigation and monitoring laid out in this final rule. We and the Navy will meet annually (if deemed necessary by either agency) to discuss the monitoring reports, Navy research and development outcomes, current science, and determine whether mitigation or monitoring modifications are appropriate (see the 2012 FSEIS/SOEIS Subchapter 1.4.5).

Comment 34: The NRDC stated that the proposed rule and DSEIS screened out more than 20 recommended OBIAs that otherwise received habitat rankings of ''two'' or greater, on the grounds that they are not of high importance for non-baleen whales including areas in the Northeast Atlantic, the Mediterranean Sea, and the Gully. They believe this approach to be non-precautionary and inappropriate for the marine mammal species on which the SURTASS LFA sonar system has not been tested. They cite that certain species other than baleen whales, such as sperm whales and pinnipeds, have greater acoustic sensitivity in the low frequencies than do odontocetes as a group; and a number of other species, such as beaked whales and harbor porpoises, have demonstrated sensitivity to a variety of sounds at relatively low acoustic thresholds. NRDC further stated: ''Originally, NMFS intended to treat frequency specialization as one factor among several in determining the relative importance of a would-be OBIA. Including such areas in practicability discussions with the Navy, and addressing them on a case-by-case basis, is required under the MMPA, and is a reasonable alternative that should be considered, and adopted, in the SEIS.''

Response: In the **Federal Register** publication of the proposed rule for our initial determination, we explained that it was appropriate to consider marine mammal OBIAs only for those species whose best hearing sensitivity is in the low frequency range and screen out areas that qualified solely on the basis of their importance for mid- or high-frequency hearing specialist species such as sperm whales, beaked whales, and harbor porpoises (77 FR 842; January 6, 2012; page 877). We have carefully considered the commenter's recommendations, and following is a more detailed explanation of how we plan to proceed with a modification to our plan for these species.

We and the Navy both acknowledge the evidence showing that beaked whales and harbor porpoises have responded to a variety of sources (but not SURTASS LFA sonar) at lower received levels than other species respond to those same sources. Even if one assumed that beaked whales or harbor porpoises similarly also respond to SURTASS LFA sonar at lower received levels than other taxa, in light of their very decreased sensitivity to this frequency, the distances at which beaked whales and harbor porpoises can hear LFA sonar sounds (and therefore be expected to respond) are still significantly less than those for low-frequency hearing specialist species.

Additionally, (which is the difference between the animal's hearing threshold for a particular frequency and the received sound level) for beaked whales and harbor porpoises at the LFA sonar frequency is significantly lower than the sensation level for low-frequency hearing specialists. In addition, the sensation level for beaked whales and harbor porpoises at the LFA sonar frequency is also smaller than their sensation level when exposed to higher frequencies. These facts may lessen the likelihood of a response. So–whereas the extensive distances at which low

frequency specialist species might hear and potentially respond to the SURTASS LFA sonar source support the designation of large areas as OBIAs to, where practicable, limit operation and reduce impacts to mysticetes in areas of high densities or important behaviors, the far shorter distances from the LFA sonar source at which beaked whales or harbor porpoises might potentially respond would not support operational limitations across large areas in the form of OBIAs. The SURTASS LFA sonar mitigation and buffer zones and the coastal standoff zones will offer significant protection for beaked whales and harbor porpoises from a sound source that they are less physically equipped to hear than are mysticetes.

Further, regarding the original assumption that beaked whales or harbor porpoises might respond to SURTASS LFA sonar in the same manner and at the same lower received levels (than other taxa) that they respond to other sound sources, some scientists suggest that the ecological context of LFA sonar sweeps (which are similar to mysticete vocalizations) for beaked whales and harbor porpoises is such that one should not expect them to negatively respond. However, we, and the scientists we consulted, are unaware of targeted data to support this hypothesis (though there were opportunistic observations of these species during the Low Frequency Sound Scientific Research Program (LFA SRP)), which is why we recommended that the Navy augment their monitoring plan to address whether and how these species respond to LFA sonar, which they did (see the Beaked Whale and Harbor Porpoise Monitoring Section).

Regarding the inclusion of OBIAs for pinnipeds and sperm whales because they are more sensitive to lower frequency sounds than other odontocetes: we have included OBIAs for pinnipeds where warranted (OBIA 8—Patagonian Shelf Break), and we have not identified any areas that meet the OBIA criteria based solely on sperm whales. We, in consultation with the Navy, will consider designating OBIAs for sperm whales if, through the adaptive management process, areas that meet the OBIA criteria are identified. Based on vocalizations, anatomy, and other information, sperm whales are likely to be more sensitive in the LFA sonar frequency range than other odontocetes and therefore the distance at which they would hear and potentially respond to the source is likely more similar to mysticetes. Accordingly, we will consider the designation of OBIAs for that species should supporting information become available.

Comment 35: The NRDC stated: ''Both LFA I and LFA II [litigation] recognize that the burden to identify OBIAs rests squarely with the agencies. As the Court has noted, ''it is improper for NMFS, the government agency tasked by the MMPA with requiring measures to ensure the least practicable impact on marine mammals when authorizing takes, to shift the burden to members of the public to prove that additional exclusion areas are warranted.'' *NRDC* v. *Gutierrez,* 2008 WL 360852 at *8. It is equally improper for the agencies to shift that same burden to other agencies or experts. Id. (observing that NMFS had 'improperly shifted the burden to its own parent agency to provide detailed information regarding the marine life there')."

Response: See Comments 12 and 13. We did not shift the burden of identifying OBIAs to other agencies or to the subject matter experts.

Comment 36: The NRDC stated: ''The agencies have improperly rejected numerous [OBIA] areas on the grounds that they occur entirely within the Navy's 22-km (12 nm) coastal exclusion zone. First, NMFS failed to consider the relevance of identifying important near-coastal habitat to establishing meaningful buffer zones for these areas. Instead, it summarily ruled out the vast majority of established and proposed MPAs as ineligible for additional protection because they fall within the coastal zone (see DSEIS at D–39 to D–101), and instructed its experts to nominate only areas extending at least partly beyond the 12 nm limit (DSEIS at D–4). (This problem is soluble by generally enlarging the coastal stand-off zone.)." Citing Navy's the behavioral risk function, the NRDC suggested that the agencies should consider and adopt wider buffer zones around their OBIAs.

Response: The Navy has stated in their request for regulations and Letters of Authorization that they will not operate SURTASS LFA sonar vessels within 22 km (14 mi; 12 nm) of any coastline, including islands. Therefore, focusing our efforts to nominate areas outside of this zone is logical and appropriate.

Regarding the commenter's suggestion that the Navy adopt a wider buffer zone around OBIAs, we refer the commenter to Response to Comment NRDC–17 of the Navy's 2012 FSEIS/SOEIS.

Comment 37: The NRDC stated: ''Under the various settlement agreements and orders that have helped govern use of the LFA system since 2002, the Navy has practicably avoided several biologically important areas in the western Pacific, particularly off the coast of Asia and in the Philippine Sea. It is not entirely clear how NMFS considered these areas in the present process, since the DSEIS suggests that its regional experts proposed somewhat different (and generally more expansive) boundaries than the ones adopted in the course of negotiation in LFA I and LFA II; in any case, however, all but one of these candidate OBIAs were rejected, most receiving scores of ''zero'' (or at best ''one'') on the agency's scale. NMFS' evaluation of these areas is highly problematic. Even though they occur in a region where little comparative density information is available and thus require the use of alternative sources to assess; even though they are supported by expert recommendation; even though additional sources suggest the occurrence there of small, localized populations and endemism in some species; and even though avoidance of at least part of these areas appears practicable, at least on a seasonal basis—none of these potential avoidance areas was assessed for its practicability. See, e.g., DSEIS at D–338 (scoring as ''zero'' a resident population of fin whales in the Yellow Sea and East China Sea that exhibits morphological differences from other fin whales). Nor, apparently, did NMFS attempt to obtain additional data on these areas beyond what its regional experts proposed."

Response: See Comments 12, 13, and 14 regarding the scope of our analyses. These areas cited in the comment do not meet the biological criteria for designation as an OBIA so there was no need for a practicability assessment by the Navy. Moreover, the Stipulated Settlement Agreement Order setting forth those areas explicitly stated it was not intended to serve as precedent for future rulemaking.

Regarding fin whales in the north Pacific Ocean, we found no new data to clarify the population structure of the species. Mizroch *et al.* (2009) reviewed the distribution and movement data available for the region and cited literature from the late 1950s and early 1960s, noting the possibility of a non-migratory stock of fin whales in the East China Sea. We note that these are the same citations provided by the subject matter expert. Fujino (1960) suggested that whales caught in the East China Sea were part of a local population that did not migrate to northern waters. In addition to Fujino's immunogenetic findings, he analyzed unpublished data that indicated fin whales from the East China Sea were different from other North Pacific fin whales in terms of growth rate, length at sexual maturity,

external body proportions, shape of skull and shape and growth rate of baleen.

Comment 38: The NRDC stated: ''According to the DSEIS, the Navy eliminated the Southern California Bight from the list of ''eligible'' OBIAs because it determined that ''avoiding this area is impracticable.'' DSEIS at 4–80. The Navy does not provide any specific information on LFA training in the SOCAL Range Complex, making a full assessment difficult; but even assuming that its determination is well-founded, more analysis is required. As it stands, the DSEIS appears to consider the practicability only of a complete, year-round LFA sonar exclusion. It does not consider any procedural requirements (e.g., requiring Fleet-level approval for use), substantive standards (e.g., allowing use only when certain criteria are met), or targeted restrictions (e.g., limiting the number of activities per annum or avoiding biologically important periods such as the blue whale foraging season), or any other mitigation methods that would protect this vital habitat while allowing the Navy use for training purposes. The Southern California Bight is an area of high importance to multiple marine mammal species, including several species of endangered baleen whales, and maintains, despite some apparent shifts in habitat, what is certainly one of the largest concentrations of blue whales on the planet. Reconsideration of this area is essential. NMFS should confirm that no other areas have been rejected thus far for reasons of practicability.''

Response: See Comment 16 regarding our discussions with the Navy on the practicality of more limited time/area closures for this area. The Navy's 2012 FSEIS/SOEIS (Subchapter 4.5.2.3) provided specific and sufficient information to support the Navy's determination that avoiding this area is operationally impracticable. Because of the year-round training that occurs on this range, the Southern California Range Complex was the only OBIA candidate that the Navy considered to be operationally impracticable to avoid.

The Navy is not currently planning to use SURTASS LFA sonar in the Southern California Bight. If the Navy were to plan use of SURTASS LFA pursuant to the FSEIS/SOEIS, the Navy would include the details of that plan in the Letter of Authorization application for the applicable year. At that time, we and the Navy will discuss what, if any, other measures are practicable in light of the projected use of SURTASS LFA sonar and best information available for the species potentially affected by that use.

Regarding consideration of other areas by the Navy, we confirm that the Navy has not eliminated other areas from consideration based upon practicability.

Comment 39: The NRDC stated: ''Finally, the Navy may be able to affirmatively define its operating area, in some regions, in a way that avoids high-value habitat and most if not all OBIAs. As the Court has observed, confining LFA operations to areas and seasons of lesser concern would be an effective means of mitigation. See *NRDC* v. *Gutierrez,* 2008 WL 360852 at *6. While the Navy has indicated that it cannot, as a general rule, practicably site its activities in low-value habitat for marine mammals, that option may be available in some regions. The Navy's current operating area off Hawaii, for example, which was established through the 2008 settlement agreement in LFA II, effectively avoids most if not all of the areas of greatest importance to small, localized populations of marine mammals around the main Hawaiian Islands, as well as the Papahanaumokuakea Marine National Monument. The agencies should consider using this reasonable alternative in specific places, like Hawaii, where it may be viable.''

Response: The Navy's annual Letters of Authorization application process (2011 DSEIS/SOEIS Sub-chapter 2.4.2) includes the goal '' * * * to identify marine areas for SURTASS LFA sonar routine testing, training and military operations that would have the least practicable adverse impacts on marine mammals, while meeting National Security objectives.'' This entails, as part of the SURTASS LFA sonar sensitivity/risk assessment approach, the evaluation of operating areas with minimal marine mammal/animal activities, as portrayed in Figure 2–3 and discussed in Subchapter 4.4 of the 2012 FSEIS/SOEIS. As to the commenter's proposal for the Navy to adopt the 2008 settlement agreement's coastal standoff distance in specific places, like Hawaii, we refer the commenter to the comprehensive OBIA analysis process that was detailed in the 2012 FSEIS/SOEIS Appendix D and in Appendix F of the final document. We believe that the OBIA analysis process incorporated the prospect of the Navy avoiding areas of importance to small, distinct populations of marine mammals with limited distributions including around the main Hawaiian Islands and elsewhere to the greatest extent feasible considering national security tasking.

Comment 40: The NRDC stated: ''Finally, the Navy's summary analysis, as the Court recognized, does not take into account the shelf's particular environmental importance and vulnerability. *NRDC* v. *Gutierrez,* 2008 WL 360852 at *23 (''the importance of the location of the continental shelf to the environmental impact''). The LFA II Court agreed that the Navy need not necessarily analyze the specific dual-criteria exclusion [i.e., a 22-km versus a 46-km coastal standoff zone] established in the previous years' injunction for the Philippine Sea; however, it also found that this did not excuse the Navy 'from evaluating a dual criteria alternative that would meet the stated purpose and need, such as a dual criteria alternative used in some areas, but not others, with an exception for non-routine military tracking operations. *NRDC* v. *Gutierrez,* 2008 WL 360852 at *23. The Court based its conclusion particularly on the importance of the location of the continental shelf to the environmental impact and the fact that the Navy has been operating under a dual criteria for five years. The Court's point is all the more salient to the present DSEIS, given that the Navy has been operating with dual criteria throughout the western Pacific (i.e., its entire effective operating area) for almost ten years now.''

NRDC further stated: ''The Court observed in LFA II that NMFS' failure to properly designate OBIAs rendered more serious' its failure to consider dual-criteria alternatives for the continental shelf. SDEIS at *13. The Court did not say that an OBIA analysis could render a dual-criteria analysis completely unnecessary—but even if it could, the agencies' analysis in the DSEIS simply does not fill the need that the Court identified.''

Response: All SURTASS LFA sonar operations must occur under the geographic restriction of a coastal standoff range of at least 22 km (14 mi; 12 nm).

We, along with the Navy, considered the biological importance of the continental shelf outside the current coastal standoff range within the OBIA analysis (see Response to Comment 31).

Comment 41: The NRDC stated: ''The Court, in 2008, observed that the Navy's impact analysis did not reflect the latest abundance data, particularly for 'small localized' populations of marine mammals. *NRDC* v. *Gutierrez,* 2008 WL 360852 at *16–17. Unfortunately, in the present DSEIS, the Navy appears again to have used basin-wide or pelagic abundance estimates in determining the size of some more discrete marine mammal populations, as, for example, around Hawaii. DSEIS at 4–61 to 4–62. The Navy should use the latest, most precautionary data, to properly reflect

new information on marine mammal population structuring.

Response: The Navy used pelagic data because the Navy intends to operate in offshore, pelagic waters. However, they have included modeled estimates for the false killer whale insular stock around Hawaii in addition to information on the pelagic stock in the 2012 FSEIS/SOEIS.

Also, the Navy has revised the 2012 FSEIS/SOEIS to include modeled data on the coastal bottlenose dolphin stocks off U.S. east coast (southern migratory coastal stock, northern Florida coastal stock, and central Florida coastal stock). We refer the reader to Tables 4–14, 4–15, 4–17, C–26, C–27, and C–29 in the Navy's 2012 FSEIS/SOEIS.

We also note that one of our qualifying criteria for designating OBIAs is small, distinct populations of marine mammals with limited distributions.

Comment 42: The NRDC stated that the proposed rule and DSEIS heavily relied on the LFA Scientific Research Program (SRP) in establishing risk parameters for the LFA sonar system. They also noted that the new DSEIS appears to put even more reliance on the SRP, applying it directly to non-focal species and suggested that the SRP's focal follow technique could not detect more complex changes in responses. Finally, the NRDC advocated that we take a more conservative approach in extrapolating from the SRP.

Response: We agree that technologies that produce finer resolution data have advanced since conclusion of the LFA LFS SRP. However, very few active underwater systems/sensors have the benefit of such a directed and extensive research effort as have the LFS SRP. The results of the LFS SRP are still sound (See Response to Comment 9). Moreover, there has never been evidence of SURTASS LFA sonar causing injury, and all analysis and modeling results support the conclusion that no more than 12 percent of any marine mammal species or stock has been taken by Level B harassment from SURTASS LFA sonar on an annual basis. In fact the percentages have been much lower for the majority of marine mammal stocks.

Comment 43: ''The Navy's preferred alternative would allow LFA training to proceed within the Navy's existing U.S. ranges (among many other locations), particularly the Hawaii Range Complex and SOCAL Range Complex. Within these ranges, the Navy has greater opportunity to apply additional monitoring measures. While the 2007 SEIS evaluated and rejected a number of supplemental measures, it did not consider the use of passive gliders or other passive acoustic systems to monitor the potential on-range operating area in advance of LFA activity, whether to ensure that densities of target species are sufficiently low before exercises begin, to relocate or adjust the timing of an LFA exercise, or for another planning purpose. Nor of course could the earlier SEIS evaluate the various new marine mammal monitoring techniques developed by the Office of Naval Research and other bodies over the last four years. The Navy should consider additional monitoring measures when operating LFA close to shore or in established Navy ranges.''

Response: We authorize Navy Range Complex mitigation and monitoring requirements under separate regulations. When SURTASS LFA sonar operates on a Navy range complex, it does so under its current final rule and Letter of Authorization

The commenter also refers to various new marine mammal monitoring techniques developed by the Office of Naval Research (ONR) and other bodies over the last four years. We understand that the Navy's Deputy for Undersea Surveillance, under the Chief of Naval Operations, maintains a cooperative relationship with ONR's Marine Mammals Program and, as such, will be aware of any new marine mammal monitoring systems or techniques that could potentially be used with SURTASS LFA sonar, depending on its safety, efficacy, cost-effectiveness, and practicability.

Miscellaneous Issues

Comment 44: Several individuals, OceanCare, and the Surfrider Foundation, expressed general opposition to SURTASS LFA sonar activities and to our issuance of a Marine Mammal Protection Act authorization because of the danger of killing or harassing marine life. Another individual protested our decision to allow continued harassment of marine mammals by the United States Navy and stated: ''NMFS' responsibility is to act as such a steward, not to rubber stamp proposals which have the potential to cause significant harm to the majestic marine mammals which roam the oceans of the world.''

Response: We appreciate the commenters' concerns for the marine life in the areas of the proposed activities. We note that over the course of the previous two rules, the Navy has reported no incidents of injury to or mortality of any marine mammal. However, because the probability of detection by the active sonar system within the SURTASS LFA sonar mitigation zone is not 100 percent, we will include a small number of Level A harassment takes for marine mammals over the course of the five-year rule.

The activities, described in detail in the Proposed Rule (77 FR 842; January 6, 2012), include the use of active acoustic sources incidental to upcoming routine training and testing and use of the SURTASS LFA sonar system during military operations. It is our responsibility to determine whether the activities will have a negligible impact on the affected species or stocks; will have an unmitigable adverse impact on the availability of the species or stock(s) for subsistence uses, where relevant; and to prescribe the means of effecting the least practicable adverse impact on the affected species or stocks and their habitat, as well as monitoring and reporting requirements.

Regarding authorizing harassment, the Marine Mammal Protection Act allows U.S. citizens (which includes the Navy) to request take of marine mammals incidental to specified activities, and requires us to authorize such taking if we can make the necessary findings required by law and if we set forth the appropriate prescriptions. As explained throughout this rulemaking, we have made the necessary findings under 16 U.S.C. 1371(a)(5)(A) to support issuance of this final rule and Letters of Authorization to the Navy.

Comment 45: One commenter stated: ''In *Winter* v. *Natural Resources Defense Council,* 555 U.S. 7, 12 (2008), the court strongly suggested that even if irreparable harm to the marine mammals could be found due to the Navy's activities, 'any such injury is outweighed by the public interest and the Navy's interest in effective, realistic training of its soldiers.' The court, in weighing the Navy's interests against the perceived environmental impact, went so far as to state: '[T]he proper determination of where the public interest lies does not strike us as a close question.' Accordingly, the record fails to show environmental impact projections that outweigh the public interest in national defense here. First, the proposal itself indicates that no mortalities of protected marine mammals are anticipated (77 FR 842–01, 846). Second, projected Level A Harassment seems practically non-existent as well (0.0001% of north Pacific right whale stocks and 0.00% of all other species) (77 FR 842–01, 884).''

Response: This comment is beyond the scope of this rulemaking.

Estimated Take of Marine Mammals

In the Estimated Take of Marine Mammals section of the proposed rule, we related the potential effects to

marine mammals from SURTASS LFA sonar operations to the Marine Mammal Protection Act's definitions of Level A and Level B harassment and attempted to quantify the effects that might occur from the specific activities that the Navy intends to conduct (77 FR 842; January 6, 2012; pages 882–884).

In the Estimates of Potential Marine Mammal Exposure section of the proposed rule, we described in detail how the Navy calculated its take estimates through modeling (77 FR 842; January 6, 2012; pages 883–884). Briefly, the Navy must predict the sound field to which a given marine mammal species could be exposed over time to assess the potential effects on marine mammals by the SURTASS LFA sonar source operating at a given site. This is a multi-part process involving:

(1) The ability to predict or estimate an animal's location in space and time;

(2) The ability to predict or estimate the three-dimensional sound field at these times and locations;

(3) The integration of these two data sets into the Acoustic Integration Model (AIM) to estimate the total acoustic exposure for each animal in the modeled population; and

(4) Converting the resultant cumulative exposures (within the post-AIM analysis) for a modeled population into an estimate of the risk of a significant disturbance of a biologically important behavior (i.e., a take estimate for Level B harassment of marine mammals based upon an estimated percentage of each stock affected by SURTASS LFA sonar operations) or an assessment of risk in terms of injury of marine mammals (i.e., a take estimate for Level A harassment of marine mammals based on a cumulative exposure of greater than or equal to 180-dB re: 1 μPa single ping equivalent).

Because it is infeasible to model enough representative sites to cover all potential SURTASS LFA operating areas, the Navy's application presented 19 modeled sites as examples to provide take estimates for potential operating areas based on the current political climate. These data are examples of areas where the Navy could request Letters of Authorization under the 5-year rule because they are in areas of potential strategic importance and/or areas of possible naval fleet exercises. Thus the proposed rule did not specify the number of marine mammals that may be taken in the proposed locations because these are determined annually through various inputs such as mission location, mission duration, and season of operation.

For this final rule, we are adopting the Navy's estimates shown in the 2012 Final Supplemental Environmental Impact Statement/Supplemental Overseas Environmental Impact Statement (Tables 4.4 through 4.23) as the best scientific information currently available. The Navy continuously updates the analyses with new marine mammal biological data (e.g., behavior, distribution, abundance, and density) whenever new information becomes available.

For the annual applications for Letters of Authorization, the Navy proposes to present both the estimated percentage of a stock and the corresponding estimated numbers of individual animals of a stock that may be potentially harassed by SURTASS LFA sonar.

We do not expect that marine mammals would be injured by SURTASS LFA sonar because a marine mammal should be detected through the three-part monitoring program (visual, passive acoustic and active acoustic monitoring) and the Navy would suspend or delay active transmissions. The probability of detection of a marine mammal by the HF/M3 active sonar system within the SURTASS LFA sonar mitigation zone approaches 100 percent based on multiple pings (see the 2001 FOEIS/EIS, Subchapters 2.3.2.2 and 4.2.7.1 for the system's sonar testing results). The Navy's acoustic analyses predict that less than 0.0001 percent of the endangered north Pacific right whale stock and 0.00 percent of the stocks of all other marine mammal species may be exposed to levels of sound that could potentially result in Level A harassment (i.e., exposures at 180 dB re: 1 μPa or greater). Quantitatively, the Navy's request translates into take estimates of zero animals for any species including the endangered north Pacific right whale. However, because the probability of detection by the active sonar system within the SURTASS LFA sonar mitigation zone is not 100 percent, we will include a small number of Level A harassment takes for marine mammals over the course of the five-year regulations based on qualitative analyses.

Reviewing the Navy's historical data on visual alerts that have triggered a suspension of SURTASS LFA sonar transmissions, the data indicate that the largest grouping of mysticetes or odontocetes that triggered a shutdown outside of the SURTASS LFA sonar mitigation zone and within the buffer zone is three and two respectively. Based on this, we analyzed the take of no more than six mysticetes (total), across all species requested in the Navy's application by Level A harassment; no more than 25 odontocetes (across all species) by Level A harassment; and no more than 25 pinnipeds (across all species) by Level A harassment over the course of the 5-year regulations. These are the only quantitative adjustments that we have made to the requested takes from the Navy's modeled exposure results. Again, we note that over the course of the previous two rulemakings, the Navy has reported no incidents of injury to or mortality of any marine mammal. As with the 2002 and 2007 Rules, the Navy will limit operation of SURTASS LFA sonar to ensure that no more than 12 percent of any marine mammal stock would be taken by Level B harassment annually, over the course of the five-year regulations. This annual per-stock cap applies regardless of the number of SURTASS LFA sonar vessels operating. Also, the Navy will use the 12 percent cap to guide its mission planning and annual LOA applications. We have made no other changes to this section in the final rule.

Analysis and Negligible Impact Determination

Our proposed rule for SURTASS LFA sonar operations included a section that addressed the analysis and negligible impact determination of the Navy's activities on the affected species or stocks (77 FR 842; January 6, 2012; pages 884–887). The Navy has described its specified activities based on best estimates of the number of hours that the Navy will conduct SURTASS LFA sonar operations. The exact number of transmission hours may vary from year to year, but will not exceed 432 hours (18 days) annually for each vessel.

Taking all of the previous discussions into account, including the following:

- We anticipate no mortalities and very few or more likely no injuries to result from the action;
- We require the Navy to implement mitigation and monitoring measures including performing delay/shutdown protocols of active SURTASS LFA sonar transmissions when monitoring detects a marine mammal; geographic operational restrictions in coastal areas and offshore areas of biological importance for marine mammals;
- We anticipate a relatively small number of SURTASS LFA sonar systems deployed as well as a low number of annual transmission hours;
- We anticipate no adverse effects on annual rates of recruitment or survival of the affected species or stock; and
- Our consideration of the following sections discussed later in this document.

We have determined that Navy training, testing, and military operations

utilizing SURTASS LFA sonar will have a negligible impact on the marine mammal species and stocks present in operational areas in areas of the Pacific, Atlantic, and Indian Oceans and the Mediterranean Sea.

Behavioral Harassment

As discussed in the Potential Effects of Exposure to SURTASS LFA Sonar Operations section in the proposed rule (77 FR 842; January 6, 2012; page 865–871), marine mammals may respond to SURTASS LFA sonar operations in many different ways, a subset of which qualifies as behavioral harassment. One thing that the take estimates do not take into account is the fact that marine mammals will most likely avoid strong sound sources to one extent or another. Although an animal that avoids the sound source will still be taken in some instances (such as if the avoidance results in a missed opportunity to feed, interruption of reproductive behaviors, etc.) in other cases avoidance may result in fewer instances of take than were estimated or in the takes resulting from exposure to a lower received level than was estimated, which could result in a less severe response.

For SURTASS LFA sonar operations, the Navy provided information (Tables 24–42 of the Navy's application) estimating numbers of total takes that could occur within the proposed operational areas. For reasons stated previously in this document, the specified activities associated with the proposed SURTASS LFA sonar operations will most likely fall within the realm of Level B behavioral harassment. We base this assessment on a number of factors from the Navy's 1997–98 Low Frequency Sound Scientific Research Program.

The Navy designed the two-year study to assess the potential impacts of SURTASS LFA sonar on the behavior of low-frequency hearing specialists, those species believed to be at (potentially) greatest risk. This field research addressed three important behavioral contexts for baleen whales: (1) Blue and fin whales feeding in the southern California Bight, (2) gray whales migrating past the central California coast, and (3) humpback whales breeding off Hawaii. Taken together, the results from the three phases of the LFS SRP do not support the hypothesis that most baleen whales exposed to received levels near 140 dB re: 1 μPa would exhibit disturbance behavior and avoid the area. These experiments, which exposed baleen whales to received levels ranging from 120 to about 155 dB re: 1 μPa, detected only minor, short-term behavioral responses. However, short-term behavioral responses do not necessarily constitute significant changes in biologically important behaviors.

Temporary Threshold Shift

Schlundt *et al.* (2000) documented temporary threshold shift in trained bottlenose dolphins and belugas after exposure to intense 1-second signal duration tones at 400 Hertz (Hz), and 3, 10, 20, and 75 kilohertz. We note that at the low frequency band tones of 400 Hz, the researchers were unable to induce temporary threshold shift in any animal at levels up to 193 dB re: 1 μPa at 1 m (the maximum level associated with the experiment's equipment). The researchers implied that the temporary threshold shift for a 100-second signal would be approximately 184 dB (DoN, 2001; Table 1).

When SURTASS LFA sonar transmits, there is a boundary that encloses a volume of water where received levels equal or exceed 180 dB re: 1 μPa (the 180–dB isopleth LFA sonar mitigation zone) and a volume of water outside this boundary where received levels are below 180 dB re: 1 μPa. The level of risk for temporary threshold shift for marine mammals depends on their location in relation to SURTASS LFA sonar. However, the Navy's standard protective measures, captured in our regulation, would ensure delay or suspension of SURTASS LFA sonar transmissions if any of the three monitoring measures detect a marine mammal within 2 km (1.2 mi; 1.1 nm) of the vessel. Thus, the mitigation measures would allow the Navy to reduce the number of marine mammals exposed to received levels of SURTASS LFA sonar or HF/M3 active sonar sound that could result in temporary threshold shift. For transient sounds, the sound level necessary to cause temporary threshold shift is inversely related to the duration of the sound. Again, in the case of SURTASS LFA sonar, we do not expect animals to be exposed to levels high enough or durations long enough to result in temporary threshold shift. In order to receive more than one ''ping'' during a normal vessel leg, an animal would need to match the ship in speed and course direction between pings.

Also, the Navy will conduct SURTASS LFA sonar operations to ensure that the sound field does not exceed 180 dB re: 1 μPa within 22 km (14 mi; 12 nm) of any coastline or within 1-km (0.62 mi; 0.54 nm) of the perimeter of any OBIA. These measures offer protection to areas with higher densities of marine mammals. Because the Navy will operate for the most part in waters that are not areas known for high concentrations of marine mammals, few, if any, marine mammals would be within the SURTASS LFA sonar mitigation and buffer zones.

Because of the relatively short duty cycle, the water depth of the convergence zone ray path, the movement of marine mammals in relationship to the SURTASS LFA sonar vessel, and the effectiveness of the three-part mitigation program, few marine mammals are likely to be affected by temporary threshold shift.

Permanent Threshold Shift

In our 2002 and 2007 rules, we, along with the Navy, based their estimate of take by injury or the significant potential for such take (Level A harassment) on the criterion of 180–dB. We continue to believe this is a scientifically supportable and conservative value for preventing auditory injury or the significant potential for such injury (Level A harassment), as it represents a value less than where the potential onset of a minor temporary threshold shift in hearing might occur based on Schlundt *et al.'s* (2000) research (see the Navy's 2007 Final Comprehensive Report Tables 5 through 8).

This regulation requires the Navy to ensure delay or suspension of SURTASS LFA sonar transmissions if any of the three monitoring protocols detect a marine mammal either entering the LFA sonar mitigation or buffer zone; (i.e., within approximately two km (1.2 mi; 1.1 nm)) of the SURTASS LFA sonar transmit array or vessel. The mitigation protocols would avoid exposing marine mammals to received levels of SURTASS LFA sonar or HF/M3 active sonar sound that would result in injury (Level A harassment). The sound pressure level that is capable of potentially causing injury to an animal is within less than 1 km (0.62 mi; 0.54 nm) of the vessel. Implementing a shutdown zone of approximately 2 km (1.2 mi; 1.1 nm) around the SURTASS LFA sonar array and vessel will ensure that no marine mammals are exposed to a sound pressure level greater than approximately 175 dB re: 1 μPa (received level). This is significantly lower than the 180–dB re: 1 μPa (received level) used for other acoustic projects for protecting marine mammals from injury. Serious injury is unlikely to occur unless a marine mammal is well within the 180–dB LFA sonar mitigation zone and close to the source. The closer the mammal is to the SURTASS LFA sonar transmit array or the vessel, the more likely that the Navy will detect the animal with the three-part monitoring protocols leading to the immediate

delay or suspension of SURTASS LFA sonar transmissions.

From 2003 to 2011, the Navy reported a total of 12 visual sightings (including two sightings during non-operational periods and one sea turtle sighting), four passive acoustic detections, and 130 HF/M3 active sonar system detections of marine mammals, all leading to 139 suspensions/delays of transmissions in accordance with mitigation protocols. Because the HF/M3 active sonar system is able to monitor large and medium marine mammals out to an effective range of 2 to 2.5 km (1.2 to 1.5 mi; 1.1 to 1.3 nm) from the vessel, it is unlikely that the SURTASS LFA sonar operations would expose marine mammals to a sound pressure level greater than approximately 175 dB re: 1 μPa. The area between the 180–dB LFA sonar mitigation zone and the additional 1-km (0.62 mi; 0.54 nm) buffer zone proposed by us (estimated to extend to approximately the 175-dB re: 1 μPa isopleth from the vessel) is an area where marine mammals would experience Level B harassment if exposed to SURTASS LFA sonar transmissions, in accordance with the Navy's risk analysis and acoustic modeling (DoN, 2001; Subchapter 4.2.3). Past results of the HF/M3 sonar system tests provide confirmation that the system has a demonstrated probability of single-ping detection of 95 percent or greater for single marine mammals, 10 m (32.8 ft) in length or larger, and a probability approaching 100 percent for multiple pings for any sized marine mammal. Further, implementing a shutdown zone of approximately 2 km (1.2 mi; 1.1 nm) around the vessel will ensure that no marine mammals are exposed to a sound pressure level greater than approximately 175 dB re: 1 μPa.

With three types of mitigation monitoring for detecting marine mammals, we believe it is unlikely that any marine mammal would be exposed to received levels of 180 dB re: 1 μPa before detection and the resulting SURTASS LFA sonar shutdown. However, because the probability is not zero, the Navy has requested and we considered Level A harassment takes incidental to SURTASS LFA sonar operations.

Mortality

There is no empirical evidence of strandings of marine mammals associated with the employment of SURTASS LFA sonar. Moreover, the system acoustic characteristics differ between low-frequency active sonar addressed here and the mid-frequency active sonars associated with strandings: Low frequency active sonars use frequencies generally below 1,000 Hz, with relatively long signals (pulses) on the order of 60 seconds; while mid-frequency active sonars use frequencies greater than 1,000 Hz, with relatively short signals on the order of 1 second.

We provided a summary of common features shared by the strandings events in Greece (1996), Bahamas (2000), Madeira (2000), Canary Islands (2002), Hanalei Bay (2004), and Spain (2006) in the proposed rule (77 FR 842; January 6, 2012; pages 871–872). These included operation of mid-frequency active sonar, deep water close to land (such as offshore canyons), presence of an acoustic waveguide (surface duct conditions), and periodic sequences of transient pulses (i.e., rapid onset and decay times) generated at depths less than 32.8 ft (10 m) by sound sources moving at speeds of 2.6 m/s (5.1 knots) or more during sonar operations (D'Spain, *et al.,* 2006). None of these features relate to SURTASS LFA sonar operations.

In summary, based on these analyses, the past nine years of SURTASS LFA sonar operations, and results from the LFS Scientific Research Program, we do not anticipate that SURTASS LFA sonar operations will likely have adverse effects on annual rates of recruitment or survival (i.e., population-level effects). Further, in consideration of the fact that the 22-km (14mi; 12 nm) coastal standoff zone and designated OBIAs restrict the use of SURTASS LFA sonar in known areas of feeding, calving, and breeding for marine mammals, we do not expect the activity to have the sort of energetic impacts on individuals that would be likely to result in reduced survivorship or reproductive success.

Accordingly we have determined that the total taking over the 5-year period of the regulations and related Letters of Authorization for the Navy's SURTASS LFA sonar activities will have a negligible impact on the affected species or stocks in the Navy's SURTASS LFA sonar mission areas.

Subsistence Harvest of Marine Mammals

We included a detailed discussion of the potential effects of the Navy's SURTASS LFA sonar operations on subsistence harvest (77 FR 842; January 6, 2012; pages 886–887). The information contained in this section has not changed from what was in the proposed rule.

We have determined that the possible future employment of SURTASS LFA sonar will not lead to unmitigable adverse impacts on the availability of marine mammal species or stocks for subsistence uses in the Gulf of Alaska.

Should the Navy operate SURTASS LFA sonar in the Gulf of Alaska, sonar operation would adhere to the shutdown in the mitigation and buffer zones, as well as established geographic restrictions, which include the coastal standoff range (which dictates that the sound field produced by the sonar must be below 180 dB re: 1 μPa within 22 km (14 mi; 12 nm) of any coastline) and at 1 km (0.62 mi; 054 nm) seaward of any OBIA outer perimeter which includes north Pacific right whale critical habitat. Additionally, the Navy will continue to keep Indian Tribal Governments informed of the timeframes of any future SURTASS LFA sonar exercises planned for the Gulf of Alaska or offshore the Washington or Oregon coasts.

Endangered Species Act

There are 15 marine mammal species under our jurisdiction that are listed as endangered or threatened under this Act with confirmed or possible occurrence in potential operational areas for SURTASS LFA sonar: The blue, fin, sei humpback, bowhead, north Atlantic right, north Pacific right, southern right, gray, and sperm whales as well as the western and eastern distinct population segments of the Steller sea lion, Mediterranean monk seal, Hawaiian monk seal, the eastern distinct population segments of the Steller sea lion; the Guadalupe fur seal and the southern distinct population segments of the spotted seal.

Pursuant to Section 7 of the Endangered Species Act, the Navy has consulted with NOAA Fisheries' Office of Protected Resources, Endangered Species Act Interagency Cooperation Division, on this action. We have also consulted internally on the issuance of regulations and annual LOAs under section 101(a)(5)(A) of the Marine Mammal Protection Act for this activity. NMFS' August 2012 Biological Opinion concludes that the proposed SURTASS LFA sonar operations and NMFS' issuance of regulations and subsequent LOAs to authorize incidental take of marine mammals are not likely to jeopardize the continued existence of the threatened and endangered species under NMFS' jurisdiction and are not likely to result in the destruction or adverse modification of critical habitat.

National Environmental Policy Act

We have participated as a cooperating agency on the Navy's 2012 FSEIS/SOEIS for employment of SURTASS LFA sonar, published on June, 8, 2012. The Navy has posted this document at *http://www.surtass-lfa-eis.com.* We have

adopted the Navy's 2012 FSEIS/SOEIS in connection with this Marine Mammal Protection Act rulemaking and prepared a Record of Decision.

Determination

Based on the analyses contained here and in the proposed rule (and other related documents) of the likely effects of the specified activity on marine mammals and their habitat and dependent upon the implementation of the mitigation and monitoring measures, we find that the Navy's SURTASS LFA sonar operations using active acoustic sources (including the HF/M3 active sonar system) over the five-year period will have a negligible impact on the affected species or stocks and will not result in an unmitigable adverse impact on the availability of marine mammal species or stocks for taking for subsistence uses. We have issued regulations for these activities that prescribe the means of effecting the least practicable adverse impact on marine mammals and their habitat and set forth requirements pertaining to the monitoring and reporting of that taking.

Classification

This action does not contain any collection of information requirements for purposes of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 *et seq.*).

The Office of Management and Budget has determined that this final rule is not significant for purposes of Executive Order 12866.

Pursuant to the Regulatory Flexibility Act, the Chief Counsel for Regulation of the Department of Commerce certified to the Chief Counsel for Advocacy of the Small Business Administration at the proposed rule stage, that this rule, if adopted, would not have a significant economic impact on a substantial number of small entities. We published the certification in the **Federal Register** notice of the proposed rulemaking on January 6, 2012. We received no comments about the certification. Accordingly, a final regulatory flexibility analysis is not required and none has been prepared.

The Assistant Administrator for Fisheries has determined that there is good cause under the Administrative Procedure Act (5 U.S.C. 553(d)(3)) to waive the 30-day delay in effective date of the measures contained in the final rule. The Navy has a compelling national policy reason to continue military readiness activities without interruption to the routine training and testing as well as use of the SURTASS LFA sonar system during military operations.

This rule making began shortly after our receipt of the Navy's application for take authorization in August 2011. During that year, Navy, with our participation as a cooperating agency, was preparing its FSEIS/SOEIS for SURTASS LFA sonar. Both agencies seriously considered all public comments and worked together to ensure an outcome that satisfied both the Navy's purpose and need and our statutory responsibilities. In addition, after the proposed rule was published in the **Federal Register** in January 2012, we undertook a review of Hoyt (2011), a new edition of our key reference document to identify OBIAs in the world's oceans, to ensure we had not overlooked any other areas as potential OBIAs. In addition to the considerable time it took to review over 300 new areas identified in Hoyt (2011), the outcome of our review required us to engage in additional analyses and discussions both internally and with the Navy to determine if any other areas warranted OBIA consideration and designation.

The current regulation expires on August 15, 2012. The Navy has a compelling national policy reason to continue military readiness activities without interruption to the routine training and testing, and use of the SURTASS LFA sonar system. Under these circumstances, it was not possible to finalize the MMPA rule making and the NEPA obligations with sufficient time to allow for the 30-day delay in effectiveness date.

As discussed below, suspension/interruption of the Navy's ability to conduct routine training and testing as well as use of SURTASS LFA sonar during military operations disrupts adequate and realistic testing of military equipment, weapons, and sensors for proper operation and suitability for combat essential to national security.

In order to meet its national security objectives, the Navy must continually maintain its ability to operate in a challenging at-sea environment, conduct military operations, control strategic maritime transit routes and international straits, and protect sea lines of communications that support international commerce. To meet these objectives, the Navy must identify, develop, and procure defense systems by continually integrating test and evaluation support throughout the defense acquisition process and providing essential information to decision-makers. Such testing and evaluation is critical in determining that defense systems perform as expected and whether these systems are operationally effective, suitable, survivable, and safe for their intended use.

In order to effectively fulfill its national security mission, the Navy has a need to conduct routine training and testing as well as use of the SURTASS LFA sonar system during military operations covered by this final rule as soon as possible. The defense acquisition process is structured to be responsive and acquire quality products that satisfy user needs with measurable improvements on mission capability and operational support in a timely manner. Test and evaluation confirms performance of platforms and systems against documented capability needs and adversary capabilities. Delays in acquisition test and evaluation affect the Navy's need to meet its statutory mission to deploy worldwide naval forces equipped to meet existing and emergent threats. The Navy would be unable to plan to conduct activities covered by this final rule in the immediate future due to the uncertainties in the planning process and the fiscal and other consequences of planning for, preparing for, and then cancelling a major testing event. A 30-day delay furthers the amount of time the Navy is unable to plan for and execute an activity covered by this rule. Further, should an immediate national security issue arise; the 30-day delay would prevent the Navy from meeting its mission, which would have adverse national security consequences.

Waiver of the 30-day delay of the effective date of the final rule will allow the Navy to continue put SURTASS LFA sonar capability into the hands of U.S. Sailors quickly, while also ensuring compliance with the MMPA.

List of Subjects in 50 CFR Part 218

Exports, Fish, Imports, Indians, Labeling, Marine mammals, Penalties, Reporting and recordkeeping requirements, Seafood, Transportation.

Dated: August 13, 2012.

Alan D. Risenhoover,

Director, Office of Sustainable Fisheries, performing the functions and duties of the Deputy Assistant Administrator for Regulatory Programs.

For reasons set forth in the preamble, 50 CFR part 218 is amended as follows:

PART 218–REGULATIONS GOVERNING THE TAKING AND IMPORTING OF MARINE MAMMALS

■ 1. The authority citation for part 218 continues to read as follows:

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

Subparts T through W [Added and Reserved]

■ 2. Reserved subparts T through W are added.

■ 3. Subpart X is added to read as follows:

Subpart X—Taking and Importing of Marine Mammals; Navy Operations of Surveillance Towed Array Sensor System Low Frequency Active (SURTASS LFA) Sonar

Sec.

Subpart X—Taking and Importing of Marine Mammals; Navy Operations of Surveillance Towed Array Sensor System Low Frequency Active (SURTASS LFA) Sonar

§ 218.230 Specified activity, level of taking, and species.

Regulations in this subpart apply only to the incidental taking of those marine mammal species specified in paragraph (b) of this section by the U.S. Navy, Department of Defense, while engaged in the operation of no more than four SURTASS LFA sonar systems conducting active sonar operations in areas specified in paragraph (a) of this section. The authorized activities, as specified in a Letter of Authorization issued under §§ 216.106 and 218.238, include the transmission of low frequency sounds from the SURTASS LFA sonar system and the transmission of high frequency sounds from the mitigation sonar described in § 218.234 during routine training and testing as well as during military operations.

(a) The incidental take, by Level A and Level B harassment, of marine mammals from the activity identified in this section may be authorized in certain areas of the Pacific, Atlantic, and Indian Oceans and the Mediterranean Sea, as specified in a Letter of Authorization.

(b) The incidental take, by Level A and Level B harassment, of marine mammals from the activity identified in this section is limited to the following species and species groups:

(1) *Mysticetes*–blue whale (*Balaenoptera musculus*), bowhead whale (*Balaena mysticetus*), Bryde's whale (*Balaenoptera edeni*), fin whale (*Balaenoptera physalus*), gray whale (*Eschrichtius robustus*), humpback whale (*Megaptera novaeangliae*), minke whale (*Balaenoptera acutorostrata*), North Atlantic right whale (*Eubalaena glacialis*), North Pacific right whale (*Eubalena japonica*), pygmy right whale (*Caperamarginata*), sei whale (*Balaenoptera borealis*), southern right whale (*Eubalaena australis*),

(2) *Odontocetes*–Andrew's beaked whale (*Mesoplodon bowdoini*), Arnoux's beaked whale (*Berardius arnuxii*), Atlantic spotted dolphin (*Stenella frontalis*), Atlantic white-sided dolphin (*Lagenorhynchus acutus*), Baird's beaked whale (*Berardius bairdii*), Beluga whale (*Dephinapterus leucas*), Blainville's beaked whale (*Mesoplodon densirostris*), Chilean dolphin (*Cephalorhynchus eutropia*), Clymene dolphin (*Stenella clymene*), Commerson's dolphin (*Cephalorhynchus commersonii*), common bottlenose dolphin (*Tursiops truncatus*), Cuvier's beaked whale (*Ziphiuscavirostris*), Dall's porpoise (*Phocoenoides dalli*), Dusky dolphin (*Lagenorhynchus obscurus*), dwarf sperm and pygmy sperm whales (*Kogia simus* and *K. breviceps*), false killer whale (*Pseudorca crassidens*), Fraser's dolphin (*Lagenodelphis hosei*), Gervais' beaked whale (*Mesoplodon europaeus*), ginkgo-toothed beaked whale (*Mesoplodon ginkgodens*), Gray's beaked whale (*Mesoplodon grayi*), Heaviside's dolphin (*Cephalorhynchus heavisidii*), Hector's beaked whale (*Mesoplodon hectori*), Hector's dolphin (*Cephalorhynchus hectori*); Hourglass dolphin (*Lagenorhynchus cruciger*), Hubbs' beaked whale (*Mesoplodon carhubbsi*), harbor porpoise (*Phocoena phocoena*); Indo-Pacific bottlenose dolphin (*Tursiops aduncus*), killer whale (*Orca orcinus*), long-beaked common dolphin (*Delphinuscapensis*), long-finned pilot whale (*Globicephalamelas*), Longman's beaked whale (*Indopacetus pacificus*), melon-headed whale (*Peponocephala electra*), northern bottlenose whale (*Hyperodon ampullatus*), northern right whale dolphin (*Lissodelphis borealis*), Pacific white-sided dolphin (*Lagenorhynchus obliquidens*), pantropical spotted dolphin (*Stenella attenuata*), Peale's dolphin (*Lagenorhynchus australis*), Perrin's beaked whale (*Mesoplodon perrini*), pygmy beaked whale (*Mesoplodon peruvianus*), pygmy killer whale (*Feresa attenuata*), Risso's dolphin (*Grampus griseus*), rough-toothed dolphin (*Steno bredanensis*), Shepherd's beaked whale (*Tasmacetus sheperdii*), short-beaked common dolphin (*Delphinus delphis*), short-finned pilot whale (*Globicephala macrorhynchus*), southern bottlenose whale (*Hyperodon planifrons*), southern right whale dolphin (*Lissodelphis peronii*), Sowerby's beaked whale (*Mesoplodon bidens*), spade-toothed beaked whale (*Mesoplodon traversii*), spectacled porpoise (*Phocoena dioptrica*), sperm whale (*Physeter macrocephalus*), spinner dolphin (*Stenella longirostris*), Stejneger's beaked whale (*Mesoplodon stejnegeri*), strap-toothed beaked whale (*Mesoplodon layardii*), striped dolphin (*Stenella coeruleoalba*), True's beaked whale (*Mesoplodon mirus*), white-beaked dolphin (*Lagenorhynchus albirostris*),

(3) *Pinnipeds*–Australian sea lion (*Neophoca cinerea*), California sea lion (*Zalophus californianus*), Galapagos fur seal (*Arctocephalus galapagoensis*), Galapagos sea lion (*Zalophus wollebaeki*), gray seal (*Halichoerus grypus*), Guadalupe fur seal (*Arctocephalus townsendi*), harbor seal (*Phoca vitulina*), harp seal (*Pagophilus groenlandicus*), Hawaiian monk seal (*Monachus schauinslandi*), hooded seal (*Cystophora cristata*), Juan Fernadez fur seal (*Arctocephalus philippi*), Mediterranean monk seal (*Monachus monachus*), New Zealand fur seal (*Arctocephalus forsteri*), New Zealand fur seal (*Phocarctos hookeri*), northern elephant seal (*Mirounga angustirostris*), northern fur seal (*Callorhinus ursinus*), ribbon seal (*Phoca fasciata*), South African and Australian fur seals (*Arctocephalus pusillus*), South American fur seal (*Arctocephalus australis*), South American sea lion (*Otaria flavescens*), southern elephant seal (*Mirounga leonina*), spotted seal (*Phoca largha*), Steller sea lion (*Eumetopias jubatus*), subantarctic fur seal (*Arctocephalus tropicalis*).

§ 218.231 Effective dates.

Regulations are effective August 15, 2012 through August 15, 2017.

§ 218.232 Permissible methods of taking.

(a) Under Letters of Authorization issued pursuant to §§ 216.106 and 218.238 of this chapter, the Holder of the Letter of Authorization may incidentally, but not intentionally, take marine mammals by Level A and Level B harassment within the areas described in § 218.230(a), provided that the activity is in compliance with all terms, conditions, and requirements of these regulations and the appropriate Letter of Authorization.

(b) The Holder of the Letter of Authorization must conduct the

activities identified in § 218.230 in a manner that minimizes, to the greatest extent practicable, any adverse impacts on marine mammals and their habitat.

(c) The incidental take of marine mammals under the activities identified in § 218.230 is limited to the species listed in § 218.230(b) by the method of take indicated in paragraphs (c)(2) through (5) of this section.

(1) The Navy must maintain a running calculation/estimation of takes of each species over the effective period of these regulations.

(2) Level B harassment will not exceed 12 percent of any marine mammal stock listed in § 218.230(b)(1) through (3) annually over the course of the five-year regulations. This annual per-stock cap of 12 percent applies regardless of the number of SURTASS LFA sonar vessels operating.

(3) Level A harassment of no more than six mysticetes (total), of any of the species listed in § 218.230(b)(1) over the course of the five-year regulations.

(4) Level A harassment of no more than 25 odontocetes (total), of any of the species listed in § 218.230(b)(2) over the course of the five-year regulations.

(5) Level A harassment of no more than 25 pinnipeds (total), of any of the species listed in § 218.230(b)(3) over the course of the five-year regulations.

§ 218.233 Prohibitions.

No person in connection with the activities described in § 218.230 may:

(a) Take any marine mammal not specified in § 218.230(b);

(b) Take any marine mammal specified in § 218.230 other than by incidental take as specified in § 218.232(c)(2) through (5);

(c) Take any marine mammal specified in § 218.230 if NMFS makes a determination that such taking results in more than a negligible impact on the species or stocks of such marine mammal; or

(d) Violate, or fail to comply with, any of the terms, conditions, or requirements of these regulations or a Letter of Authorization issued under §§ 216.106 and 218.238 of this chapter.

§ 218.234 Mitigation.

When conducting operations identified in § 218.230, the mitigation measures described in this section and in any Letter of Authorization issued under §§ 216.106 and 218.238 must be implemented.

(a) *Personnel Training—Lookouts:* (1) The Navy shall train the lookouts in the most effective means to ensure quick and effective communication within the command structure in order to facilitate implementation of protective measures if they spot marine mammals.

(2) The Navy will hire one or more marine mammal biologists qualified in conducting at-sea marine mammal visual monitoring from surface vessels to train and qualify designated ship personnel to conduct at-sea visual monitoring.

(b) *General Operating Procedures:* (1) Prior to SURTASS LFA sonar operations, the Navy will promulgate executive guidance for the administration, execution, and compliance with these regulations and any Letters of Authorization issued.

(2) The Holder of a Letter of Authorization will not transmit the SURTASS LFA sonar signal at a frequency greater than 500 Hertz (Hz).

(c) *LFA Sonar Mitigation Zone and 1-km Buffer Zone; Suspension and Delay:* (1) Prior to commencing and during SURTASS LFA sonar transmissions, the Holder of a Letter of Authorization will determine the propagation of LFA sonar signals in the ocean and the distance from the SURTASS LFA sonar source to the 180-decibel (dB) re: 1 μPa isopleth.

(2) The Holder of a Letter of Authorization will establish a 180-dB LFA sonar mitigation zone around the surveillance vessel that is equal in size to the 180-dB re: 1 μPa isopleth (i.e., the volume subjected to sound pressure levels of 180 dB or greater) as well as a one-kilometer (1-km) buffer zone around the LFA sonar mitigation zone.

(3) If a marine mammal is detected, through monitoring required under § 218.235, within or about to enter the LFA sonar mitigation zone plus the 1-km buffer zone, the Holder of the Letter of Authorization will immediately delay or suspend SURTASS LFA sonar transmissions.

(d) *Resumption of SURTASS LFA sonar transmissions:* (1) The Holder of a Letter of Authorization will not resume SURTASS LFA sonar transmissions earlier than 15 minutes after:

(i) All marine mammals have left the area of the SURTASS LFA sonar mitigation and buffer zones; and

(ii) There is no further detection of any marine mammal within the LFA sonar mitigation and buffer zones as determined by the visual, passive, and high frequency monitoring described in § 218.235.

(e) *Ramp-up Procedures for the high-frequency marine mammal monitoring (HF/M3) sonar required under § 218.235:* (1) The Holder of a Letter of Authorization will ramp up the HF/M3 sonar power level beginning at a maximum source sound pressure level of 180 dB re: 1 μPa at 1 meter in 10-dB increments to operating levels over a period of no less than five minutes:

(i) At least 30 minutes prior to any SURTASS LFA sonar transmissions;

(ii) Prior to any SURTASS LFA sonar calibrations or testing that are not part of regular SURTASS LFA sonar transmissions described in § 218.230; and

(iii) Anytime after the HF/M3 active sonar source has been powered down for more than two minutes.

(2) The Holder of a Letter of Authorization will not increase the HF/M3 active sonar system's sound pressure level once a marine mammal is detected; ramp-up may resume once marine mammals are no longer detected.

(f) *Geographic Restrictions on the SURTASS LFA Sonar Sound Field:* (1) The Holder of a Letter of Authorization will not operate the SURTASS LFA sonar such that:

(i) The SURTASS LFA sonar sound field exceeds 180 dB re: 1 μPa (rms) at a distance less than 12 nautical miles (nm) (22 kilometers (km)) from any coastline, including offshore islands;

(ii) The SURTASS LFA sonar sound field exceeds 180 dB re: 1 μPa (rms) at a distance less than 1 km (0.5 nm) seaward of the outer perimeter of any offshore biologically important area designated in § 218.234(f)(2) during the period specified.

(2) The Offshore Biologically Important Areas (OBIAs) for marine mammals (with specified periods) for SURTASS LFA sonar operations are the following:

Name of area	Location of area	Months of importance
(i) Georges Bank	40°00′ N, 72°30′ W; 39°37′ N, 72°09′ W; 39°54′ N, 71°43′ W; 40°02′ N, 71°20′ W; 40°08′ N, 71°01′ W; 40°04′ N, 70°44′ W; 40°00′ N, 69°24′ W; 40°16′ N, 68°27′ W; 40°34′ N, 67°13′ W; 41°00′ N, 66°24′ W; 41°52′ N, 65°47′ W; 42°20′ N, 66°06′ W; 42°18′ N, 67°23′ W.	Year-round.

Name of area	Location of area	Months of importance
(ii) Roseway Basin Right Whale Conservation Area.	43°05′ N, 65°40′ W; 43°05′ N, 65°03′ W; 42°45′ N, 65°40′ W; 42°45′ N, 65°03′ W.	June through December, annually.
(iii) Great South Channel, U.S. Gulf of Maine, and Stellwagen Bank National Marine Sanctuary (NMS).	41°00.000′ N, 69°05.000′ W; 42°09.000′ N, 67°08.400′ W; 42°53.436′ N, 67°43.873′ W; 44°12.541′ N, 67°16.847′ W; 44°14.911′ N, 67°08.936′ W; 44°21.538′ N, 67°03.663′ W; 44°26.736′ N, 67°09.596′ W; 44°16.805′ N, 67°27.394′ W; 44°11.118′ N, 67°56.398′ W; 43°59.240′ N, 68°08.263′ W; 43°36.800′ N, 68°46.496′ W; 43°33.925′ N, 69°19.455′ W; 43°32.008′ N, 69°44.504′ W; 43°21.922′ N, 70°06.257′ W; 43°04.084′ N, 70°21.418′ W; 42°51.982′ N, 70°31.965′ W; 42°45.187′ N, 70°23.396′ W; 42°39.068′ N, 70°30.188′ W; 42°32.892′ N, 70°35.873′ W; 42°07.748′ N, 70°28.257′ W; 42°05.592′ N, 70°02.136′ W; 42°03.664′ N, 69°44.000′ W; 41°40.000′ N, 69°45.000′ W.	January 1 to November 14, annually.
(iv) Southeastern U.S. Right Whale Seasonal Habitat.	Critical Habitat Boundaries are coastal waters between 31°15′ N and 30°15′ N from the coast out 15 nautical miles (nmi); and the coastal waters between 30°15′ N and 28°00″ N from the coast out 5 nmi. (50 CFR § 226.13(c)); OBIA Boundaries are coastal waters between 31°15″ N and 30°15″ N from 12 to 15 nmi..	November 15 to April 15, annually.
(v) North Pacific Right Whale Critical Habitat	57°03′ N, 153°00′ W; 57°18′ N, 151°30′ W; 57°00′ N, 151°30′ W; 56°45′ N, 153°00′ W. (50 CFR § 226.215).	March through August, annually.
(vi) Silver Bank and Navidad Bank	Silver Bank: ..... 20°38.899′ N, 69°23.640′ W; 20°55.706′ N, 69°57.984′ W; 20°25.221′ N, 70°00.387′ W; 20°12.833′ N, 69°40.604′ W; 20°13.918′ N, 69°31.518′ W; 20°28.680′ N, 69°31.900′ W Navidad Bank: 20°15.596′ N, 68°47.967′ W; 20°11.971′ N, 68°54.810′ W; 19°52.514′ N, 69°00.443′ W; 19°54.957′ N, 68°51.430′ W; 19°51.513′ N, 68°41.399′ W.	December through April, annually.
(vii) Coastal waters of Gabon, Congo and Equatorial Guinea.	An exclusion zone following the 500-m isobath extending from 3°31.055′ N, 9°12.226″ E in the north offshore of Malabo southward to 8°57.470″ S, 12°55.873″ E offshore of Luanda	June through October, annually.
(viii) Patagonian Shelf Break	Between 200- and 2000-m isobaths and the following latitudes: 35°00″ S, 39°00″ S, 40°40″ S, 42°30″ S, 46°00″ S, 48°50″ S..	Year-round.
(ix) Southern Right Whale Seasonal Habitat	Coastal waters between 42°00″ S and 43°00″ S from 12 to 15 nm including the enclosed bays of Golfo Nuevo, Golfo San Jose, and San Matias. Golfos San Jose and San Nuevo are within 22 km (14 mi; 12 nm) coastal exclusion zone	May through December, annually.
(x) Central California National Marine Sanctuaries.	Single stratum boundary created from the Cordell Bank (15 CFR 922.10), Gulf of the Farallones (15 CFR 922.80), and Monterey Bay (15 CFR 922.30) NMS legal boundaries. Monterey Bay NMS includes the Davidson Seamount Management Zone	June through November, annually.
(xi) Antarctic Convergence Zone	30° E to 80° E, 45° S; 80° E to 150° E, 55° S; 150° E to 50° W, 60° S; 50° W to 30° E, 50° S.	October through March, annually.

Name of area	Location of area	Months of importance
(xii) Piltun and Chayvo offshore feeding grounds in the Sea of Okhotsk.	54°09.436′ N, 143°47.408′ W; 54°09.436′ N, 143°17.354′ W; 54°01.161′ N, 143°17.354′ W; 53°53.580′ N, 143°13.398′ W; 53°26.963′ N, 143°28.230′ W; 53°07.013′ N, 143°35.481′ W; 52°48.705′ N, 143°38.447′ W; 52°32.077′ N, 143°37.788′ W; 52°21.605′ N, 143°34.163′ W; 52°09.470′ N, 143°26.582′ W; 51°57.686′ N, 143°30.208′ W; 51°36.033′ N, 143°42.794′ W; 51°08.082′ N, 143°51.301′ W; 51°08.082′ N, 144°16.742′ W; 51°24.514′ N, 144°11.139′ W; 51°48.116′ N, 144°10.809′ W; 52°03.194′ N, 144°20.363′ W; 52°23.235′ N, 144°10.150′ W; 52°28.674′ N, 144°12.787′ W; 52°42.523′ N, 144°10.150′ W; 53°12.972′ N, 143°55.648′ W; 53°18.505′ N, 143°56.637′ W; 53°23.041′ N, 143°53.011′ W; 53°28.250′ N, 143°53.341′ W; 53°44.039′ N, 143°49.056′ W; 53°53.207′ N, 143°50.045′ W; 53°59.819′ N, 143°48.067′ W.	June through November, annually.
(xiii) Coastal waters off Madagascar	16°03′55.04″ S, 50°27′12.59″ E; 16°12′23.03″ S, 51°03′37.38″ E; 24°30′45.06″ S, 48°26′00.94″ E; 24°15′28.07″ S, 47°46′51.16″ E; 22°18′00.74″ S, 48°14′13.52″ E; 20°52′24.12″ S, 48°43′13.49″ E; 19°22′33.24″ S, 49°15′45.47″ E; 18°29′46.08″ S, 49°37′32.25″ E; 17°38′27.89″ S, 49°44′27.17″ E; 17°24′39.12″ S, 49°39′17.03″ E; 17°19′35.34″ S, 49°54′23.82″ E; 16°45′41.71″ S, 50°15′56.35″ E.	July through September, annually for humpback whale breeding and November through December, annually for migrating blue whales.
(xiv) Madagascar Plateau, Madagascar Ridge, and Walters Shoal.	25°55′20.00″ S, 44°05′15.45″ E; 25°46′31.36″ S, 47°22′35.90″ E; 27°02′37.71″ S, 48°03′31.08″ E; 35°13′51.37″ S, 46°26′19.98″ E; 35°14′28.59″ S, 42°35′49.20″ E; 31°36′57.96″ S, 42°37′49.35″ E; 27°41′11.21″ S, 44°30′11.01″ E.	November through December, annually.
(xv) Ligurian-Corsican-Provencal Basin and Western Pelagos Sanctuary in the Mediterranean Sea.	42°50.271′ N, 06°31.883″ E; 42°55.603′ N, 06°43.418″ E; 43°04.374′ N, 06°52.165″ E; 43°12.600′ N, 07°10.440″ E; 43°21.720′ N, 07°19.380″ E; 43°30.600′ N, 07°32.220″ E; 43°33.900′ N, 07°49.920″ E; 43°36.420′ N, 08°05.580″ E; 43°42.600′ N, 08°22.140″ E; 43°50.880′ N, 08°34.500″ E; 43°58.560′ N, 08°47.700″ E; 43°59.040′ N, 08°56.040″ E; 43°57.047′ N, 09°03.540″ E; 43°52.260′ N, 09°08.520″ E; 43°47.580′ N, 09°13.500″ E; 43°36.060′ N, 09°16.620″ E; 43°28.440′ N, 09°05.820″ E; 43°21.360′ N, 09°02.100″ E; 43°16.020′ N, 08°57.240″ E; 43°04.440′ N, 08°47.580″ E; 42°54.900′ N, 08°35.400″ E; 42°45.900′ N, 08°27.540″ E; 42°36.060′ N, 08°22.020″ E; 42°22.620′ N, 08°15.849″ E; 42°07.202′ N, 08°17.174″ E; 41°52.800′ N, 08°15.720″ E; 41°39.780′ N, 08°05.280″ E; 41°28.200′ N, 08°51.600″ E; 42°57.060′ N, 06°19.860″ E.	July to August, annually.
(xvi) Hawaiian Islands Humpback Whale NMS and Penguin Bank.	21°10′02.179″ N, 157°30′58.217″ W; 21°09′46.815″ N, 157°30′22.367″ W; 21°06′39.882″ N, 157°31′00.778″ W; 21°02′51.976″ N, 157°30′30.049″ W; 20°59′52.725″ N, 157°29′28.591″ W; 20°58′05.174″ N, 157°27′35.919″ W; 20°55′49.456″ N, 157°30′58.217″ W; 20°50′44.729″ N, 157°42′42.418″ W; 20°51′02.654″ N, 157°44′45.333″ W; 20°53′56.784″ N, 157°46′04.716″ W; 20°56′32.988″ N, 157°45′33.987″ W; 21°01′27.472″ N, 157°43′10.586″ W; 21°05′20.499″ N, 157°39′27.802″ W; 21°10′02.179″ N, 157°30′58.217″ W.	November through April, annually.
(xvii) Costa Rica Dome	Centered at 9°N and 88°W	Year-round.

Name of area	Location of area	Months of importance
(xviii) Great Barrier Reef Between 16° S and 21° S.	16°01.829″ S, 145°38.783″ E; 15°52.215″ S, 146°20.936″ E; 17°28.354″ S, 146°59.392″ E; 20°16.228″ S, 151°39.674″ E; 20°58.381″ S, 150°30.897″ E; 20°17.007″ S, 149°38.247″ E; 20°10.941″ S, 149°18.247″ E; 20°02.403″ S, 149°12.623″ E; 19°53.287″ S, 149°03.986″ E; 19°49.866″ S, 148°52.135″ E; 19°53.287″ S, 148°44.302″ E; 19°47.965″ S, 148°36.870″ E; 19°47.205″ S, 148°26.024″ E; 19°19.978″ S, 147°39.626″ E; 19°14.065″ S, 147°37.014″ E; 19°08.913″ S, 147°31.993″ E; 19°05.667″ S, 147°24.160″ E; 19°07.576″ S, 147°18.134″ E; 18°51.718″ S, 146°51.219″ E; 18°44.258″ S, 146°54.031″ E; 18°37.175″ S, 146°51.420″ E; 18°31.620″ S, 146°43.385″ E; 18°27.595″ S, 146°40.573″ E; 17°36.676″ S, 146°20.488″ E; 17°20.484″ S, 146°16.671″ E; 17°07.745″ S, 146°13.056″ E; 16°49.769″ S, 146°11.047″ E; 16°41.835″ S, 146°03.817″ E; 16°39.706″ S, 145°54.979″ E.	May through September, annually.
(xix) Bonney Upwelling on the south coast of Australia.	37°12′20.036″ S, 139°31′17.703″ E; 37°37′33.815″ S, 139°42′42.508″ E; 38°10′36.144″ S, 140°22′57.345″ E; 38°44′50.558″ S, 141°33′50.342″ E; 39°07′04.125″ S, 141°11′00.733″ E; 37°28′33.179″ S, 139°10′52.263″ E.	December through May, annually.
(xx) Northern Bay of Bengal and Head of Swatch-of-No-Ground.	20°59.735′ N, 89°07.675″ E; 20°55.494′ N, 89°09.484″ E; 20°52.883′ N, 89°12.704″ E; 20°55.275′ N, 89°18.133″ E; 21°04.558′ N, 89°25.294″ E; 21°12.655′ N, 89°25.354″ E; 21°13.279′ N, 89°16.833″ E; 21°06.347′ N, 89°15.011″ E.	Year-round.
(xxi) Olympic Coast NMS and Prairie, Barkley Canyon, and Nitnat Canyon.	Boundaries within 23 nm (26.5 m; 42.6 km) of the coast from 47°07′ N to 48°30′ N latitude. 48°30′01.995″ N, 125°58′38.786″ W; 48°16′55.605″ N, 125°38′52.052″ W; 48°23′07.353″ N, 125°17′10.935″ W; 48°12′38.241″ N, 125°16′42.339″ W; 47°58′20.361″ N, 125°31′14.517″ W; 47°58′20.361″ N, 126°06′16.322″ W; 48°09′46.665″ N, 126°25′48.758″ W.	Olympic NMS: December, January, March, and May, annually. The Prairie, Barkley Canyon, and Nitnat Canyon: June through September, annually.
(xxii) Abrolhos Bank	16°35′34.909″ 38°52′30.455″; 16°35′31.619″ 38°43′41.069″; 16°40′00.131″ 37°23′52.492″; 19°30′59.069″ 37°23′52.446″; 19°30′59.974″ 39°33′38.351″; 19°20′24.752″ 39°30′33.03″; 18°52′16.884″ 39°32′31.789″; 18°45′09.937″ 39°32′27.709″; 18°30′59.345″ 39°30′59.669″; 18°27′28.985″ 39°30′13.453″; 18°17′30.429″ 39°26′21.073″; 18°07′43.518″ 39°19′52.924″; 18°09′24.931″ 39°16′24.913″; 18°10′04.585″ 39°12′30.425″; 18°10′20.682″ 38°39′06.185″; 18°08′50.404″ 38°35′00.059″; 18°06′05.466″ 38°31′41.385″; 18°02′09.399″ 38°29′26.179″; 17°58′01.372″ 38°28′45.409″; 17°53′58.883″ 38°29′34.612″; 16°48′58.768″ 38°55′23.768″; 16°43′15.682″ 38°53′40.007″.	August through November, annually.

(g) *Operational Exception for the SURTASS LFA Sonar Sound Field.* During military operations SURTASS LFA sonar transmissions may exceed 180 dB re: 1 μPa (rms) within the boundaries of a SURTASS LFA sonar OBIA when: operationally necessary to continue tracking an existing underwater contact; or operationally necessary to detect a new underwater contact within the OBIA. This exception does not apply to routine training and testing with the SURTASS LFA sonar systems.

§ 218.235 Requirements for monitoring.

(a) The Holder of a Letter of Authorization issued pursuant to §§ 216.106 and 218.238 must:

(1) Conduct visual monitoring from the ship's bridge during daylight hours (30 minutes before sunrise until 30 minutes after sunset) during operations that employ SURTASS LFA sonar in the active mode. The SURTASS vessels shall have lookouts to maintain a topside watch with standard binoculars (7x) and with the naked eye.

(2) Use low frequency passive SURTASS sonar to listen for vocalizing marine mammals; and

(3) Use the HF/M3 active sonar to locate and track marine mammals in relation to the SURTASS LFA sonar vessel and the sound field produced by the SURTASS LFA sonar source array, subject to the ramp-up requirements in § 216.234(e).

(b) Monitoring under paragraph (a) of this section must:

(1) Commence at least 30 minutes before the first SURTASS LFA sonar transmission;

(2) Continue between transmission pings; and

(3) Continue either for at least 15 minutes after completion of the SURTASS LFA sonar transmission exercise or, if marine mammals are exhibiting unusual changes in behavioral patterns, for a period of time until behavior patterns return to normal or conditions prevent continued observations.

(c) Holders of Letters of Authorization for activities described in § 218.230 are required to cooperate with the National Marine Fisheries Service and any other federal agency for monitoring the impacts of the activity on marine mammals.

(d) Holders of Letters of Authorization must designate qualified on-site individuals to conduct the mitigation, monitoring and reporting activities specified in the Letter of Authorization.

(e) Holders of Letters of Authorization will continue to assess data from the Marine Mammal Monitoring Program and work toward making some portion of that data, after appropriate security reviews, available to scientists with appropriate clearances. Any portions of the analyses conducted by these scientists based on these data that are determined to be unclassified after appropriate security reviews will be made publically available.

(f) Holders of Letters of Authorization will continue to explore the feasibility of coordinating with other fleet assets and/or range monitoring programs to include the use of SURTASS towed horizontal line arrays to augment the collection of marine mammal vocalizations before, during, and after designated exercises.

(g) Holders of Letters of Authorization will collect ambient noise data and will explore the feasibility of declassifying and archiving the ambient noise data for incorporation into appropriate ocean noise budget efforts.

(h) Holders of Letters of Authorization will convene a Scientific Advisory Group (SAG) to analyze different types of monitoring/research that could increase the understanding of the potential effects of low-frequency active sonar transmissions on beaked whales and/or harbor porpoises.

(i) Holders of Letters of Authorization must conduct all monitoring required under the Letter of Authorization.

§ 218.236 Requirements for reporting.

(a) The Holder of the Letter of Authorization must submit classified and unclassified quarterly mission reports to the Director, Office of Protected Resources, NMFS, no later than 30 days after the end of each quarter beginning on the date of effectiveness of a Letter of Authorization or as specified in the appropriate Letter of Authorization. Each quarterly mission report will include all active-mode missions completed during that quarter. At a minimum, each classified mission report must contain the following information:

(1) Dates, times, and location of each vessel during each mission;

(2) Information on sonar transmissions during each mission;

(3) Results of the marine mammal monitoring program specified in the Letter of Authorization; and

(4) Estimates of the percentages of marine mammal species and stocks affected (both for the quarter and cumulatively for the year) covered by the Letter of Authorization.

(b) The Holder of a Letter of Authorization must submit an unclassified annual report to the Director, Office of Protected Resources, NMFS, no later than 45 days after the expiration of a Letter of Authorization. The reports must contain all the information required by the Letter of Authorization.

(c) A final comprehensive report must be submitted to the Director, Office of Protected Resources, NMFS, at least 240 days prior to expiration of these regulations. In addition to containing all the information required by any final year Letter of Authorization, this report must contain an unclassified analysis of new passive sonar technologies and an assessment of whether such a system is feasible as an alternative to SURTASS LFA sonar.

(d) The Navy will continue to assess the data collected by its undersea arrays and work toward making some portion of that data, after appropriate security reviews, available to scientists with appropriate clearances. Any portions of the analyses conducted by these scientists based on these data that are determined to be unclassified after appropriate security reviews will be made publically available. The Navy will provide a status update to NMFS when they submit their annual application.

(e) Following the Scientific Advisory Group's (SAG) submission of findings, and assuming the SAG recommends going forward with beaked whale and/or harbor porpoise monitoring/research, the Navy will either:

(1) Draft a plan of action outlining their strategy for implementing the SAG's recommendations; or

(2) Describe in writing why none of the SAG's recommendations are feasible and meet with NMFS to discuss any other potential options.

§ 218.237 Applications for Letters of Authorization.

(a) To incidentally take marine mammals pursuant to these regulations, the U.S. Navy authority conducting the activity identified in § 218.230 must apply for and obtain a Letter of Authorization in accordance with § 216.106.

(b) The application for a Letter of Authorization must be submitted to the Director, Office of Protected Resources, NMFS, at least 60 days before the date that either the vessel is scheduled to begin conducting SURTASS LFA sonar operations or the previous Letter of Authorization is scheduled to expire.

(c) All applications for a Letter of Authorization must include the following information:

(1) The date(s), duration, and the area(s) where the vessel's activity will occur;

(2) The species and/or stock(s) of marine mammals likely to be found within each area;

(3) The type of incidental taking authorization requested (i.e., take by Level A and/or Level B harassment);

(4) The estimated percentage and numbers of marine mammal species/stocks potentially affected in each area for the period of effectiveness of the Letter of Authorization; and

(5) The means of accomplishing the necessary monitoring and reporting that will result in increased knowledge of the species and the level of taking or impacts on marine mammal populations.

(d) The National Marine Fisheries Service will review an application for a Letter of Authorization in accordance with § 216.104(b) and, if adequate and complete, issue a Letter of Authorization.

§ 218.238 Letters of Authorization.

(a) A Letter of Authorization, unless suspended or revoked, will be valid for a period of time not to exceed one year, but may be renewed annually subject to renewal conditions in § 218.239.

(b) Each Letter of Authorization will set forth:

(1) Permissible methods of incidental taking;

(2) Authorized geographic areas for incidental takings;

(3) Means of effecting the least practicable adverse impact on the

species of marine mammals authorized for taking, their habitat, and the availability of the species for subsistence uses; and

(4) Requirements for monitoring and reporting incidental take.

(c) Issuance of a letter of authorization will be based on a determination that the level of taking will be consistent with the findings made for the total taking allowable under these regulations.

(d) Notice of issuance or denial of an application for a Letter of Authorization will be published in the **Federal Register** within 30 days of a determination.

§ 218.239 Renewal of Letters of Authorization.

(a) A Letter of Authorization issued for the activity identified in § 218.230 may be renewed upon:

(1) Notification to NMFS that the activity described in the application submitted under § 218.237 will be undertaken and that there will not be a substantial modification to the described activity, mitigation or monitoring undertaken during the upcoming period;

(2) Notification to NMFS of the information identified in § 218.237(c);

(3) Timely receipt of the monitoring reports required under § 218.236, which have been reviewed by NMFS and determined to be acceptable;

(4) A determination by NMFS that the mitigation, monitoring and reporting measures required under §§ 218.234, 218.235, and 218.236 and the previous Letter of Authorization were undertaken and will be undertaken during the upcoming period of validity of a renewed Letter of Authorization; and

(5) A determination by NMFS that the level of taking will be consistent with the findings made for the total taking allowable under these regulations.

(b) If a request for a renewal of a Letter of Authorization indicates that a substantial modification to the described work, mitigation, or monitoring will occur, or if NMFS proposes a substantial modification to the Letter of Authorization, NMFS will provide a period of 30 days for public review and comment on the proposed modification. Amending the areas for upcoming SURTASS LFA sonar operations is not considered a substantial modification to the Letter of Authorization.

(c) A notice of issuance or denial of a renewal of a Letter of Authorization will be published in the **Federal Register** within 30 days of a determination.

§ 218.240 Modifications to Letters of Authorization.

(a) Except as provided in paragraph (b) of this section, no substantial modification (including withdrawal or suspension) to a Letter of Authorization subject to the provisions of this subpart shall be made by NMFS until after notification and an opportunity for public comment has been provided. For purposes of this paragraph, a renewal of a Letter of Authorization, without modification, except for the period of validity and a listing of planned operating areas, or for moving the authorized SURTASS LFA sonar system from one ship to another, is not considered a substantial modification.

(b) If NMFS determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in § 218.230(b)(1), (2), or (3), NMFS may modify a Letter of Authorization without prior notice and opportunity for public comment. Notification will be published in the **Federal Register** within 30 days of the action.

§ 218.241 Adaptive Management.

NMFS may modify (including through addition or deletion) or augment the existing mitigation or monitoring measures (after consulting with the Navy regarding the practicability of the modifications) if doing so creates a reasonable likelihood of more effectively accomplishing the goals of mitigation and monitoring set forth in the preamble of these regulations. NMFS will provide a period of 30 days for public review and comment if such modifications are substantial. NMFS and the Navy will meet annually (if deemed necessary by either agency) to discuss the monitoring reports, Navy research and development outcomes, current science, and determine whether mitigation or monitoring modifications are appropriate. Below are some of the possible sources of new data that could contribute to the decision to modify the mitigation or monitoring measures:

(a) Results from the Navy's monitoring from the previous year's operation of SURTASS LFA sonar.

(b) Compiled results of Navy-funded research and development studies.

(c) Results from specific stranding investigations.

(d) Results from general marine mammal and sound research funded by the Navy or other sponsors.

(e) Any information that reveals marine mammals may have been taken in a manner, extent or number not anticipated by these regulations or subsequent Letters of Authorization.

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