DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT / SUPPLEMENTAL OVERSEAS ENVIRONMENTAL IMPACT STATEMENT FOR SURVEILLANCE TOWED ARRAY SENSOR SYSTEM LOW FREQUENCY ACTIVE (SURTASS LFA) SONAR
DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT/SUPPLEMENTAL OVERSEAS ENVIRONMENTAL IMPACT STATEMENT FOR SURVEILLANCE TOWED ARRAY SENSOR SYSTEM LOW FREQUENCY ACTIVE (SURTASS LFA) SONAR

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Cooperating Agency
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ABSTRACT

Pursuant to the order issued by the United States District Court for the Northern District of California on May 22, 2014, the Navy prepared this Draft Supplemental Environmental Impact Statement (SEIS)/Supplemental Overseas Environmental Impact Statement (SOEIS) for the limited purpose of remedying the deficiency under the National Environmental Policy Act (NEPA) identified on page 54 of the Court's March 28, 2014 amended summary judgment order. In that order the Court found the NEPA analysis deficient in that the Navy failed to use the best available data in the 2012 Final SEIS/SOEIS (FSEIS/SOEIS) (DoN, 2012) when it determined potential impacts from employment of SURTASS LFA sonar systems¹ on one stock of common bottlenose dolphins in Hawaiian waters rather than the more current information that show five stocks of common bottlenose dolphins in Hawaiian waters².

¹ In this SEIS/SOEIS, “SURTASS LFA sonar systems” refers to both the LFA and compact LFA (CLFA) systems, each having similar acoustic transmission characteristics.
² The Navy failed to use the stock delineations and stock abundances for the common bottlenose dolphin in Hawaiian waters from the 2010 Stock Assessment Report (Carretta et al., 2011).
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EXECUTIVE SUMMARY

Building upon analyses and information included in the Final Overseas Environmental Impact Statement/Environmental Impact Statement (FOEIS/EIS) (DoN, 2001), the Final Supplemental EIS (FSEIS) (DoN, 2007), and the FSEIS/SOEIS (DoN, 2012) for Surveillance Towed Array Sensor System Low Frequency Active (SURTASS LFA) sonar, the scope of this SEIS/SOEIS is limited to providing a revised analysis of potential impacts of SURTASS LFA sonar employment on Hawaii common bottlenose dolphin stocks in the geographic area where the five stocks that comprise the Hawaiian Islands Stock Complex of common bottlenose dolphins (Kauai/Niihau, Oahu, 4-Islands (Molokai, Lanai, Maui, and Kahoolawe), Hawaii Island, and the Hawaii Pelagic stocks) occur.

This third supplemental analysis on SURTASS LFA sonar has been prepared in compliance with the National Environmental Policy Act (NEPA) of 1969 (42 United States Code [USC] §4321 et seq.); Executive Order (EO) 12114, Environmental Effects Abroad of Major Federal Actions; the Council on Environmental Quality (CEQ) regulations for implementing the procedural provisions of NEPA (Title 40 Code of Federal Regulations [40 CFR] §§1500 to 1508); U.S. Navy (hereafter, Navy) procedures for implementing NEPA (32 CFR §775); and Navy environmental readiness guidelines. The National Marine Fisheries Service (NMFS) is a cooperating agency under NEPA regulation (40 CFR 1501.6) for the development of this narrowly-tailored SEIS/SOEIS.

ES.1 DESCRIPTION OF PROPOSED ALTERNATIVES

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18 ES.1.1 ALTERNATIVES

Since this supplement is limited to providing a revised analysis of potential impacts to Hawaii common bottlenose dolphin stocks, the alternatives evaluated in this SEIS/SOEIS remain the same as described in the 2012 SEIS/SOEIS (DoN, 2012), i.e., the No Action Alternative, Alternative 1, and Alternative 2.

Alternative 1 from the 2012 FSEIS/FSEIS included use of the same Offshore Biologically Important Areas (OBIAs) as those in the preferred alternative from the 2007 FSEIS/FSEIS. Alternative 2 from the 2012 FSEIS/FSEIS, the alternative chosen in the Navy’s August 15, 2012 Record of Decision, differed from Alternative 1 only in that Alternative 2 included a comprehensive update of the OBIAs. With respect to waters where any of the five stocks that comprise the Hawaiian Islands Stock Complex of common bottlenose dolphins could occur, however, the OBIAs in Alternatives 1 and 2 are the same because the comprehensive update in Alternative 2 did not change the OBIAs in these waters.

ES.2 AFFECTED ENVIRONMENT

SURTASS LFA sonar may be employed in the oceanic environment in which common bottlenose dolphins that are part of the Hawaiian Islands Stock Complex could occur. As such, the potential exists for impacts on the Hawaiian Islands Stock Complex of common bottlenose dolphins. In the previous NEPA and EO 12114 documentation on SURTASS LFA sonar (DoN, 2001, 2007, and 2012), aspects of the physical and socioeconomic environments were fully analyzed but are not addressed herein, as they are not relevant to the limited purpose of this SEIS/SOEIS. In this SEIS/SOEIS, only certain aspects of the biological environment relevant to the Hawaiian Islands Stock Complex of common bottlenose dolphins that are necessary to provide a revised analysis of the potential impact of SURTASS LFA sonar on these Hawaii common bottlenose dolphin stocks are addressed.

3 The provisions of NEPA apply to major Federal actions that occur or have effects in the U.S., its territories, or possessions.
4 The provisions of EO 12114 apply to major Federal actions that occur or have effects outside of U.S. territories (the U.S. its territories, and possessions).
For Hawaiian waters, NMFS has designated five stocks of common bottlenose dolphins as part of the Hawaiian Islands Stock Complex: Kauai/Niihau, Oahu, 4-Islands (Molokai, Lanai, Maui, and Kahoolawe), Hawaii Island, and the Hawaii Pelagic stocks (Carretta et al., 2014). The boundary between the Hawaii Pelagic and insular\(^5\) stocks is designated as the 1,000-meter (m) (3,281-foot [ft]) isobath, except between the Oahu and 4-Islands stocks, where the stocks are separated roughly equidistantly between Oahu and the 4-Islands group by the 500-m (1,640-ft) isobath through the center of the Kaiwi Channel.

The population sizes of the five stocks of the Hawaiian Islands Stock Complex of common bottlenose dolphins have been estimated, largely from photographic identification studies for the insular stocks, and these data represent the best currently available. Densities of the common bottlenose dolphins in the Hawaiian Islands Stock Complex are used in evaluating the potential environmental impacts associated with exposure to SURTASS LFA sonar transmissions. However, densities were not available for all the five stocks in the Hawaiian Islands Stock Complex of common bottlenose dolphins. A density of 0.0025 individuals per square kilometer was estimated for the Hawaii Pelagic stock from the 2010 dedicated visual survey of the waters of the Hawaiian exclusive economic zone (Bradford et al., 2013). Since densities were not available for the four insular stocks, densities were derived for each of these four stocks by scaling the density of the Hawaii Pelagic stock by the ratio of the pelagic stock abundance and each of the given insular stock abundances; for example, the density of the Oahu stock was calculated by multiplying the density of the Hawaii Pelagic stock (0.0025 individuals per km\(^2\)) by the Oahu stock abundance estimate (743 animals) and dividing by the Hawaii Pelagic stock abundance (5,950 animals).

**ES.3 ENVIRONMENTAL CONSEQUENCES**

The basis for the analysis of potential impacts to the five stocks of the Hawaiian Islands Stock Complex of common bottlenose dolphins presented in this SEIS/SOEIS is consistent with the FOEIS/EIS, the FSEIS, and the FSEIS/SEIS for SURTASS LFA sonar (DoN, 2001, 2007, 2012), and has been updated with respect to the potential impacts discussed below based on the best available literature and information. Except as discussed below, the assumptions and conclusions presented in Chapter 4 of the FOEIS/EIS, FSEIS, or FSEIS/SEIS with respect to potential impacts on common bottlenose dolphins remain valid and are incorporated herein by reference.

**ES3.1 POTENTIAL IMPACTS UNDER THE NO ACTION ALTERNATIVE**

Under this alternative, the Navy would not employ SURTASS LFA sonar, including within the range of the five stocks of the Hawaiian Islands Stock Complex of common bottlenose dolphins; thus, any potential impact to the five common bottlenose dolphin stocks from the proposed activities would be eliminated. As discussed more fully in the 2012 FSEIS/SEIS (DoN, 2012), however, the No Action Alternative does not meet the Navy’s purpose and need.

**ES3.2 POTENTIAL IMPACTS UNDER ALTERNATIVES 1 AND 2**

Since Alternatives 1 and 2 are the same for the waters where any of the five stocks that comprise the Hawaiian Islands Stock Complex of common bottlenose dolphins could occur, the potential impacts assessed in this SEIS/SEIS are the same under either Alternative 1 or Alternative 2. Analyses to determine the percentage of marine mammal stocks potentially affected (with mitigation) for exposures from 120 to 180 dB re 1 \(\mu Pa\) (rms) and >180 dB re 1 \(\mu Pa\) (rms) have been conducted for the five stocks comprising the Hawaiian Islands Stock Complex common bottlenose dolphins (Kauai/Niihau, Oahu, 4-Islands, Hawaii Island, and Hawaii Pelagic) in the two proposed North-Central Pacific mission areas for potential SURTASS LFA sonar missions.

The results of the Navy’s analysis demonstrate that 0.00% of any the five stocks comprising the Hawaiian Islands Stock Complex of common bottlenose dolphins would be exposed to sound levels >180 dB re 1 \(\mu Pa\) (rms) in either mission area. Thus, no common bottlenose dolphins are expected to be affected.

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5 Insular=of or having to do with an island or islands
through injury or mortality from exposure to SURTASS LFA sonar transmissions. At exposures of 120 to 180 dB re 1 µPa (rms) (single ping equivalent [SPE])\(^6\), the overall percentages for any of the five potentially affected Hawaii common bottlenose dolphin stocks range from 0.00% to 0.82% during employment of SURTASS LFA sonar for one modeled mission in each of the proposed two mission areas. The highest estimated percentage of any stock of the five stocks comprising the Hawaiian Islands Stock Complex (Kauai/Niihau, Oahu, 4-Islands, Hawaii Island, and Hawaii Pelagic) of common bottlenose dolphins potentially affected at exposures of 120 to 180 dB re 1 µPa (rms) during employment of SURTASS LFA sonar is 0.8241% of the Hawaii Pelagic stock of common bottlenose dolphins during proposed employments in the Hawaii North mission area. The second highest percentage of any stock potentially affected at SURTASS LFA sonar exposures of 120 to 180 dB re 1 µPa (rms) is 0.1921% of the Hawaii Pelagic stock of common bottlenose dolphins during proposed employments in the Hawaii South mission area. The highest potential impact to any insular stock is 0.0188% of the Hawaii Island stock in the Hawaii South mission area; the remainder of the insular stocks has much lower potential impacts.

Based on the results of the analyses in this document and the three previous NEPA EISs/SEISs, employment of SURTASS LFA sonar, when employed in accordance with the mitigation measures (geographic restrictions and monitoring/reporting) detailed in the 2012 FSEIS/SEIS (DoN, 2012), support a negative impact determination on the five stocks comprising the Hawaiian Islands Stock Complex of common bottlenose dolphins. These conclusions are consistent with the selection of Alternative 2 in the August 15, 2012 Record of Decision and do not provide any basis for modifying that decision in any respect.

**ES.4 PUBLIC PARTICIPATION**

Public involvement in the review of the Draft SEIS/SEIS is stipulated in 40 CFR Part 1503.1 of the Council on Environmental Quality regulations implementing NEPA and in Navy environmental compliance guidance. These regulations and guidance provide for active solicitation of public comment via public comment periods. A 45-day public comment period on this Draft SEIS/SEIS begins with the official publication of this draft document’s Notice of Availability in the *Federal Register* in October 2014.

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\(^6\) The term “Single Ping Equivalent” (SPE) is defined in three previous EISs/SEISs (DoN, 2001, 2007, and 2012). SPE accounts for the energy of all the SURTASS LFA sonar transmissions that a modeled animal receives during an entire simulated LFA sonar mission. Calculating potential impacts is a complex process, and the reader is referred to the previous EISs/SEISs for more detail. However, SPE is a function of sound pressure level (dB re 1 µPa), not sound exposure level (dB re 1 µPa\(^2\)-sec).
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<table>
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<th>Description</th>
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<tbody>
<tr>
<td>%</td>
<td>percent or percentage</td>
</tr>
<tr>
<td>µPa</td>
<td>microPascal(s)</td>
</tr>
<tr>
<td>CEQ</td>
<td>Council on Environmental Quality</td>
</tr>
<tr>
<td>CLFA</td>
<td>Compact Low Frequency Active</td>
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<tr>
<td>CV</td>
<td>coefficient of variation</td>
</tr>
<tr>
<td>CNO</td>
<td>Chief of Naval Operations</td>
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<tr>
<td>DASN (E)</td>
<td>Deputy Assistant Secretary of the Navy (Environment)</td>
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<tr>
<td>dB</td>
<td>decibel(s)</td>
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<tr>
<td>dB re 1 µPa @ 1 m</td>
<td>decibels relative to one microPascal measured at one meter from center of acoustic source</td>
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<tr>
<td>EIS</td>
<td>environmental impact statement</td>
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<td>ft</td>
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<tr>
<td>Hz</td>
<td>Hertz</td>
</tr>
<tr>
<td>IUCN</td>
<td>International Union for Conservation of Nature</td>
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<tr>
<td>km</td>
<td>kilometer(s)</td>
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<tr>
<td>km²</td>
<td>square kilometer</td>
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<tr>
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<td>kiloHertz</td>
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<tr>
<td>LF</td>
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<tr>
<td>LFA</td>
<td>low frequency active</td>
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<tr>
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<td>MFAS</td>
<td>mid-frequency active sonar</td>
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<td>MHI</td>
<td>Main Hawaiian Islands</td>
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<td>Marine Mammal Protection Act</td>
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<td>OEIS</td>
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<td>PTS</td>
<td>Permanent threshold shift</td>
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<td>rms</td>
<td>Root mean square</td>
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<tr>
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<td>Single Ping Equivalent</td>
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<td>SPL</td>
<td>Sound pressure level</td>
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<td>Surveillance Towed Array Sensor System</td>
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1.0 PURPOSE AND NEED

The underlying purpose and need for employment of Surveillance Towed Array Sensor System Low Frequency Active (SURTASS LFA\(^7\)) sonar remains the same as described in the 2012 Final Supplemental Environmental Impact Statement/Supplemental Overseas Environmental Impact Statement (FSEIS/SOEIS) (DoN, 2012).

1.1 SCOPE OF THIS SEIS/SOEIS

Pursuant to the order issued by the United States District Court for the Northern District of California on May 22, 2014, the Navy prepared this Draft SEIS/SOEIS for the limited purpose of remedying the deficiency under the National Environmental Policy Act (NEPA) identified on page 54 of the Court’s March 28, 2014 amended summary judgment order. In that order the Court found the NEPA analysis deficient in that the Navy failed to use the best available data in the 2012 Final SEIS/SOEIS (FSEIS/SOEIS) (DoN, 2012) when it determined impacts from use of SURTASS LFA sonar systems on one stock of common bottlenose dolphins in Hawaiian waters rather than the more current information that show five stocks of common bottlenose dolphins in Hawaiian waters (Kauai/Niihau, Oahu, 4-Islands (Molokai, Lanai, Maui, and Kahoolawe), Hawaii Island, and the Hawaii Pelagic stocks)\(^8\). Accordingly, the scope of this SEIS/SOEIS is limited to providing a revised analysis of potential impacts of SURTASS LFA sonar on the five common bottlenose dolphin stocks that comprise the Hawaiian Islands Stock Complex in the geographic area where the five stocks that comprise the Hawaiian Islands Stock Complex of common bottlenose dolphins (Kauai/Niihau, Oahu, 4-Islands (Molokai, Lanai, Maui, and Kahoolawe), Hawaii Island, and the Hawaii Pelagic stocks) occur.

This third supplemental analysis has been prepared in compliance with NEPA of 1969 (42 United States Code [USC] §4321 et seq.), Executive Order (EO) 12114, Environmental Effects Abroad of Major Federal Actions\(^10\); the Council on Environmental Quality (CEQ) regulations for implementing the procedural provisions of NEPA (Title 40 Code of Federal Regulations [40 CFR] §§1500 to 1508); U.S. Navy (hereafter, Navy) procedures for implementing NEPA (32 CFR §775); and Navy environmental readiness guidelines. The National Marine Fisheries Service (NMFS) is a cooperating agency under NEPA regulation (40 CFR 1501.6) for the development of this narrowly-tailored SEIS/SOEIS.

1.2 PUBLIC PARTICIPATION

The public was notified of the Navy's intent to prepare a narrowly-tailored SEIS/SOEIS to analyze the potential impact of SURTASS LFA sonar on the five stocks comprising the Hawaiian Islands Stock Complex of common bottlenose dolphins on July 1, 2014 (DoD, 2014). The Draft SEIS/SOEIS will be made available to the public in October 2014 and will be distributed to appropriate Federal, state, and other local organizations. Comments on the Draft SEIS/SOEIS will be accepted for 45 days beginning with the official Notice of Availability published by the U.S. Environmental Protection Agency (USEPA) in the Federal Register.

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7 In this SEIS/SOEIS, “SURTASS LFA sonar systems” refers to both the LFA and compact LFA (CLFA) systems, each having similar acoustic transmission characteristics.

8 The Navy failed to use the stock delineations and stock abundances for the common bottlenose dolphin in Hawaiian waters from the 2010 Stock Assessment Report (Carretta et al., 2011).

9 The provisions of NEPA apply to major Federal actions that occur or have impacts in the U.S., its territories, or possessions.

10 The provisions of EO 12114 apply to major Federal actions that occur or have effects outside of U.S. territories (the U.S. its territories, and possessions).
Since this supplement is limited to providing a revised analysis of potential impacts to Hawaii common bottlenose dolphin stocks, the alternatives evaluated in this SEIS/SOEIS remain the same as described in the 2012 SEIS/SOEIS (DoN, 2012), i.e., the No Action Alternative, Alternative 1, and Alternative 2. Alternative 1 from the 2012 FSEIS/FSOEIS included use of the same Offshore Biologically Important Areas (OBIAs) as the preferred alternative in the 2007 FSEIS/FSOEIS. Alternative 2 from the 2012 FSEIS/FSOEIS, the alternative chosen in the Navy’s Record of Decision, differed from Alternative 1 only in that Alternative 2 included a comprehensive update of the OBIAs. With respect to waters where any of the five stocks that comprise the Hawaiian Islands Stock Complex of common bottlenose dolphins could occur, however, the OBIAs in Alternatives 1 and 2 are the same because the comprehensive update in Alternative 2 did not change the OBIAs in these waters.
SURTASS LFA sonar may be employed in the oceanic environment in which common bottlenose dolphins that are part of the Hawaiian Islands Stock Complex could occur. As such, the potential exists for impacts on the Hawaiian Islands Stock Complex of common bottlenose dolphins. In the previous NEPA and EO 12114 documentation on SURTASS LFA sonar (DoN, 2001, 2007, and 2012), aspects of the physical and socioeconomic environments were fully analyzed but are not addressed herein, as they are not relevant to the limited purpose of this SEIS/SOEIS. This chapter includes only certain aspects of the biological environment relevant to the Hawaiian Islands Stock Complex of common bottlenose dolphins that are necessary to provide a revised analysis of the potential impact of SURTASS LFA sonar on these Hawaiian common bottlenose dolphin stocks. Except as discussed below, the assumptions and conclusions presented in Chapter 4 of the FOEIS/EIS (DoN, 2001), FSEIS (DoN, 2007), or FSEIS/SOEIS (DoN, 2012) with respect to potential impacts on common bottlenose dolphins remain valid and are incorporated herein by reference.

3.1 MARINE MAMMALS: COMMON BOTTLENOSE DOLPHIN

3.1.1 STATUS AND STOCK DESIGNATION

The International Union for Conservation of Nature (IUCN) classifies common bottlenose dolphins (*Tursiops truncatus*) globally as least concern (lower risk). Under the MMPA, NMFS manages and designates stocks of common bottlenose dolphins in U.S. territorial waters. For Hawaiian waters, NMFS has designated five stocks of common bottlenose dolphins as part of the Hawaiian Islands Stock Complex: Kauai/Niihau, Oahu, 4-Islands (Molokai, Lanai, Maui, and Kahoolawe), Hawaii Island, and the Hawaii Pelagic (Carretta et al., 2014). The Kauai/Niihau, Oahu, 4-Islands, and Hawaii Island stocks are insular stocks, since they are restricted to waters surrounding specific islands. Under the MMPA, none of the five stocks comprising the Hawaiian Islands Stock Complex of common bottlenose dolphins is considered depleted or a strategic stock.

Currently, insufficient data are available on the population structure of common bottlenose dolphins in the waters of the Northwestern Hawaiian Islands to support stock designation; for this reason, NMFS considers common bottlenose dolphins in the waters of the Northwestern Hawaiian Islands to be part of the Hawaii Pelagic stock (Carretta et al., 2014). The boundary between the Hawaii Pelagic and insular stocks is designated as the 1,000-meter (m) (3,281-foot [ft]) isobath, except between the Oahu and 4-Islands stocks, where the stocks are separated roughly equidistantly between Oahu and the 4-Islands group by the 500-m (1,640-ft) isobath through the center of the Kaiwi Channel (Figure 3-1).

3.1.2 POPULATION ESTIMATION

Density and abundance estimates of the populations of marine mammal stocks are used in evaluating the exposure risk to those stocks or populations from activities occurring in the marine environment.

3.1.2.1 Abundance Estimation

The population sizes of the five stocks of the Hawaiian Islands Stock Complex of common bottlenose dolphins have been estimated, largely from photographic identification (photo-ID) studies, for the four insular stocks (Baird et al., 2009; Carretta et al., 2014); these data represent the best that are currently available (Table 3-1). The abundance estimate of 184 dolphins for the insular Kauai/Niihau stock of common bottlenose dolphins is based on 2003 to 2005 photo-ID studies (Baird et al., 2009; Carretta et
Photo-ID studies of common bottlenose dolphins in 2002, 2003, and 2006 in Oahu waters (except the windward waters) provided the occurrence data from which an abundance of 743 dolphins was derived for the Oahu insular stock of common bottlenose dolphins (Baird et al., 2009; Carretta et al., 2014). For the abundance of the 4-Islands insular stock, occurrence data from 2002 to 2006 photo-ID studies of individual common bottlenose dolphins in the waters of Maui and Lanai were used to derive an abundance estimate of 191 dolphins (Baird et al., 2009; Carretta et al., 2014). Since this abundance estimate does not encompass common bottlenose dolphins from the waters of all four islands represented in this stock, particularly the windward waters, the abundance likely underestimates the population of the 4-Island stock of common bottlenose dolphins (Carretta et al., 2014). In 2002 through 2006, photo-ID studies in waters of Hawaii Island resulted in an abundance estimated at 128 dolphins (Baird et al., 2009; Carretta et al., 2014) for the Hawaii Island stock. Again, the photo-ID surveys did not encompass

Table 3-1. Abundances and densities of the Hawaiian Islands Stock Complex of common bottlenose dolphins during all seasons in the Hawaii North and South mission areas in which SURTASS LFA sonar may be employed.

<table>
<thead>
<tr>
<th>STOCK NAME</th>
<th>STOCK ABUNDANCE (ANIMALS)</th>
<th>STOCK ABUNDANCE REFERENCE(S)</th>
<th>STOCK DENSITY (ANIMALS PER KM²)</th>
<th>STOCK DENSITY REFERENCE(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kauai/Niihau</td>
<td>184</td>
<td>Baird et al., 2009; Carretta et al., 2014</td>
<td>0.0001</td>
<td>Bradford et al. 2013</td>
</tr>
<tr>
<td>Oahu</td>
<td>743</td>
<td>Baird et al., 2009; Carretta et al., 2014</td>
<td>0.0003</td>
<td>Bradford et al. 2013</td>
</tr>
<tr>
<td>4-Islands</td>
<td>191</td>
<td>Baird et al., 2009; Carretta et al., 2014</td>
<td>0.0001</td>
<td>Bradford et al. 2013</td>
</tr>
<tr>
<td>Hawaii Island</td>
<td>128</td>
<td>Baird et al., 2009; Carretta et al., 2014</td>
<td>0.0001</td>
<td>Bradford et al. 2013</td>
</tr>
<tr>
<td>Hawaii Pelagic</td>
<td>5,950</td>
<td>Bradford et al. 2013; Carretta et al., 2014</td>
<td>0.0025</td>
<td>Bradford et al. 2013</td>
</tr>
</tbody>
</table>
the windward waters of this stock area, so the abundance of 128 dolphins likely underestimates the total population of common bottlenose dolphins around the island of Hawaii (i.e., the Hawaii Island stock) (Carretta et al., 2014).

The stock of Hawaii Pelagic common bottlenose dolphins was recently updated with results from the 2010 dedicated line-transect visual survey of waters in the entire exclusive economic zone (EEZ) of Hawaii. The abundance of common bottlenose dolphins estimated from data observed during the 2010 survey was 5,950 bottlenose dolphins (CV\textsuperscript{11} = 0.59) in the Hawaii Pelagic stock (Bradford et al., 2013; Carretta et al., 2014).

### 3.1.2.2 Density Estimation

Density estimates were not available for all five stocks in the Hawaiian Islands Stock Complex of common bottlenose dolphins. A density of 0.0025 individuals per km\textsuperscript{2} was estimated for the Hawaii Pelagic stock from the 2010 dedicated visual survey of the waters of the Hawaiian EEZ (Bradford et al., 2013). Since density estimates were not available for the four insular stocks, density estimates were derived for the insular stocks by scaling the density estimate of the Hawaii Pelagic stock by the ratio of the Pelagic stock abundance and each of the given insular stock abundances (Table 3-1); for example, the density of the Oahu stock was calculated by multiplying the density of the Hawaii Pelagic stock (0.0025 individuals per km\textsuperscript{2}) by the Oahu stock abundance estimate (743 animals) and dividing by the Hawaii Pelagic stock abundance (5,950 animals). This process resulted in a density estimate of 0.0001 animals per km\textsuperscript{2} for the Kauai/Niihau, 4-Islands, and Hawaii Island stocks and 0.0003 animals per km\textsuperscript{2} for the Oahu stock of common bottlenose dolphins.

### 3.1.3 DISTRIBUTION

The common bottlenose dolphin is widely distributed worldwide in warm temperate to tropical waters and diverse habitats ranging from rivers and protected bays to insular waters and the open ocean (Wells and Scott, 2009). In the western North Atlantic Ocean, Gulf of California, and eastern Pacific Ocean, discrete coastal and pelagic forms of the common bottlenose dolphins have been recognized (Parsons et al., 2002; Parsons et al., 2006; Segura et al., 2006; Lowther, 2006; Waring et al., 2014).

Common bottlenose dolphins could occur throughout the waters of the Hawaiian Islands, from Hawaii Island to Kure Atoll in the Northwestern Hawaiian Islands. In the waters of the Main Hawaiian Islands (MHI), common bottlenose dolphins could occur regularly in the shallower, insular shelf waters surrounding the islands as well as in deep open-ocean, pelagic waters (Mobley et al., 2000; Barlow, 2006; Baird et al. 2009).

The waters of the Hawaiian Islands support several island-associated populations, including spinner dolphins, rough toothed dolphins, and false killer whales (Baird et al., 2006; Baird et al., 2008; Andrews et al., 2010; Chivers et al., 2010; Martien et al., 2011). Four discrete island-associated groups of common bottlenose dolphins were suggested as a result of the photo-ID work of Baird et al. (2009), during which high re-sighting rates and little to no movements among the distinct groups of bottlenose dolphins clustered around Oahu, Kauai/Niihau, the 4-Islands (Maui, Molokai, Lanai, and Kahoolawe), and Hawaii Island were observed. The genetic studies of Martien et al. (2012) later provided further support for the insular stocks of bottlenose dolphins in the MHI being distinct from the pelagic bottlenose dolphins found offshore in deeper waters. Additionally, Baird et al. (2013) found that the highest percentage of common bottlenose dolphins sighted in twelve years of compiled sighting surveys in the waters of the MHI were observed in waters less than 1,000 m (3,281 ft), and typically in waters less than 500 m (1,640 ft) deep. For this reason, the boundary between the insular and pelagic stocks of common bottlenose dolphins in the MHI is designated as the 1,000-m isobath.

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11 CV stands for coefficient of variation, which is a statistical measure of the dispersion of data points around the mean and shows the extent of variability in relation to the mean of the population.
3.1.4 **Movement and Diving Behaviors**

Although common bottlenose dolphins in the waters of other oceanic archipelagos have been observed traveling long distances between islands, such as in the Canary Islands where bottlenose dolphins traveled 30 to 120 km (16.2 to 64.8 nmi) between four islands (Tobeña et al., 2014), Baird et al. (2009) found no evidence of long-distance inter-island movements in the MHI. While individual bottlenose dolphins have been observed traveling between Kauai and Niihau and amongst the 4-Islands, no evidence exists for movements between the four discrete insular stocks of common bottlenose dolphins (Baird et al., 2006). The analysis of Baird et al. (2009) to determine the range of dispersal rates for their photo-ID data indicated rates of less than 1% per year. Little is known about how the reproductive seasonality of bottlenose dolphins in the Hawaiian Islands may affect the timing or pattern of movements in the waters of each stock’s residency.

Movement patterns of pelagic bottlenose dolphins are different than those of island-associated populations. Klatsky et al. (2007) found that pelagic common bottlenose dolphins in the deep waters off the Bermuda Pedestal traveled an average of 28 kilometers per day (15 nmi/day) in waters about 1,400 m (4,593 ft) deep and dove deeper at night, to depths greater than 450 m (1,476 ft) and lasting as long as 5 minutes. Bottlenose dolphins dive to more shallow depths, less than 50 m (164 ft), in daylight or in shallow waters (Klatsky et al., 2007). Average dive durations range from 38 seconds to 1.2 min but have been recorded lasting as long as 10 min (Mate et al., 1995; Croll et al., 1999). The deepest dive recorded by a bottlenose dolphin is 535 m (1,755 ft) by a trained individual (Ridgway, 1986).
This chapter analyzes the potential impacts on the five stocks comprising the Hawaiian Islands Stock Complex (Kauai/Niihau, Oahu, 4-Islands, Hawaii Island, and Hawaii Pelagic) of common bottlenose dolphins that could result from the implementation of the No Action Alternative, Alternative 1, and Alternative 2 from the 2012 FSEIS/SOEIS (DoN, 2012) and has been updated with respect to the potential impacts discussed below based on the best available literature and information. Except as discussed below, the assumptions and conclusions presented in Chapter 4 of the FOEIS/EIS (DoN, 2001), FSEIS (DoN, 2007), or FSEIS/SOEIS (DoN, 2012) with respect to potential impacts on common bottlenose dolphins remain valid and are incorporated herein by reference.

4.1 POTENTIAL IMPACTS UNDER THE NO ACTION ALTERNATIVE

Under this alternative, the Navy would not employ SURTASS LFA sonar, including within the range of the five stocks of the Hawaiian Islands Stock Complex of common bottlenose dolphins. Thus, any potential impact to the five common bottlenose dolphin stocks from the proposed activities would be eliminated. As discussed more fully in the 2012 FSEIS/SOEIS (DoN, 2012), however, the No Action Alternative does not meet the Navy's purpose and need.

4.2 POTENTIAL IMPACTS UNDER ALTERNATIVES 1 AND 2

The potential impacts on the five stocks comprising the Hawaiian Islands Stock Complex of common bottlenose dolphins are the same of those analyzed in the SURTASS LFA Sonar FOEIS/EIS (DoN, 2001), FSEIS (DoN, 2007), and FSEIS/SOEIS (DoN, 2012), which are incorporated by reference, except as addressed below. As discussed in Chapter 2 of this SEIS/SOEIS, Alternative 1 from the 2012 FSEIS/SOEIS differed from Alternative 2 only in that Alternative 2 (the alternative chosen in the Navy's Record of Decision), included a comprehensive update of the OBIAs. With respect to waters in which any of the five stocks that comprise the Hawaiian Islands Stock Complex of common bottlenose dolphins could occur, however, the OBIAs in Alternatives 1 and 2 are the same because the comprehensive update in Alternative 2 did not change the OBIAs in these waters. The potential impacts assessed in this SEIS/SOEIS are therefore the same under either Alternative 1 or Alternative 2.

4.2.1 AUDITORY IMPACTS

4.2.1.1 Masking

Masking occurs when noise interferes with an animal's ability to detect, discriminate, recognize, or communicate signals of interest (Fletcher, 1929; Richardson et al., 1995). Masking is most pronounced when noise is at the same frequency as the sound of interest and when noise occurs frequently.

Masking impacts on the five stocks comprising the Hawaiian Islands Stock Complex (Kauai/Niihau, Oahu, 4-Islands, Hawaii Island, and Hawaii Pelagic) of common bottlenose dolphins from exposure to SURTASS LFA sonar signals will be limited for a number of reasons. First, the frequency range of SURTASS LFA sonar transmissions (< 500 Hz) is at the lower end of the hearing range of common bottlenose dolphins (estimated at 150 Hz, up to 160 kHz) (Southall et al., 2007). Common bottlenose dolphins are most sensitive at frequencies between 14.1 kHz and 28.2 kHz (Houser and Moore, 2014), which does not overlap with the frequency range of SURTASS LFA sonar transmissions. Therefore, there is limited potential for common bottlenose dolphins to even be able to hear SURTASS LFA sonar signals, much less have them mask important signals. Second, the bandwidth of any SURTASS LFA sonar transmitted signal is limited (30 Hz), and the instantaneous bandwidth at any given time of the signal is small, on the order of ≤10 Hz. Since the amount of masking is directly related to the bandwidth of narrow
band signals (Branstetter and Finneran, 2008; Branstetter et al., 2014), such as those transmitted by
SURTASS LFA sonar, the potential for any masking in common bottlenose dolphins is expected to be
minimal and unlikely.

4.2.1.2 Behavioral Reactions

The primary potential impact on common bottlenose dolphins from exposure to SURTASS LFA sonar is
change in a biologically significant behavior, though as mentioned above, common bottlenose dolphins
are not particularly sensitive to low-frequency sounds such as SURTASS LFA sonar. Since common
bottlenose dolphins have their most sensitive hearing at frequencies between 14 and 28 kHz, recent
studies have focused on the potential impacts of mid-frequency active sonar (MFAS) on the five stocks
comprising the Hawaiian Islands Stock Complex (Kauai/Niihau, Oahu, 4-Islands, Hawaii Island, and
Hawaii Pelagic) of common bottlenose dolphins (Baird et al., 2014). Common bottlenose dolphins in the
vicinity of the Pacific Missile Range Facility in the waters of Kauai, Hawaii were tagged prior to scheduled
MFAS use. While only one individual dolphin was able to be tagged coincident with MFAS transmissions,
the animal showed no movement away from the region, despite received levels estimated at 149 to 168
dB root mean squared (rms). Given the current behavioral response function for MFAS, a high probability
of a significant behavioral reaction would be predicted at these received levels (RLs) (Finneran and
Jenkins, 2012); however, that was not observed.

4.2.2 STRANDING

Stranding occurs when marine mammals passively (unintentionally) or purposefully come ashore, either
alive, but debilitated or disoriented, or dead. The use of SURTASS LFA sonar was not associated with
any of the 11 known mass strandings that occurred from 2013 through the present in the North Pacific
Ocean. Thus, no new information suggests any stranding risk for the five stocks comprising the Hawaiian
Islands Stock Complex of common bottlenose dolphins from use of SURTASS LFA sonar.

4.2.3 QUANTITATIVE RISK ASSESSMENT ANALYSIS OF POTENTIAL IMPACTS ON COMMON
BOTTLENOSE DOLPHINS

The same analytical methodology and process used in previous risk assessment analyses of the potential
for impacts from SURTASS LFA sonar and that have been documented in three EISs/SEISs (DoN, 2001,
2007, and 2012) and in the most recent MMPA rulemaking for SURTASS LFA sonar employment (NOAA,
2012) were used in the analysis for this SEIS/SOEIS.

Two modeling locations were selected north and south of the MHI (termed “Hawaii North” and “Hawaii
South” mission areas), which represent reasonable sites where SURTASS LFA sonar could be employed.
Once sites were selected, during a sensitivity analysis, representative seasons were selected to model
the highest potential (upper bound) for potential impacts from exposure to SURTASS LFA sonar. Table 4-
from the 2012 FSEIS/FSOEIS (DoN, 2012), which is incorporated by reference, provides information
regarding the modeling location of these mission areas.

Abundance and density estimates for each of the five stocks comprising the Hawaiian Islands Stock
Complex (Kauai/Niihau, Oahu, 4-Islands, Hawaii Island, and Hawaii Pelagic) of common bottlenose
dolphins were derived at the two representative SURTASS LFA sonar mission areas during all seasons
(Table 3-1). These population data were derived from the most current, available published literature and
documentation.

Estimates of the percentage of common bottlenose dolphin stocks affected by SURTASS LFA sonar
employment in the two potential mission areas, for the seasons specified, have been derived for this
SEIS/SOEIS (Tables 4-1 and 4-2). The estimated stock values support the conclusion that estimates of
potential impacts from SURTASS LFA sonar employment on Hawaii common bottlenose dolphin stocks
are below the conditions delineated by NMFS in the LOAs issued under the 2012 Final Rule (NOAA,
2012).
Table 4-1. Estimates of the percentage of Hawaii common bottlenose dolphin stocks potentially affected by SURTASS LFA sonar (one mission) in the Hawaii North mission area during summer season.

<table>
<thead>
<tr>
<th>MARINE MAMMAL SPECIES</th>
<th>STOCK</th>
<th>NUMBER ANIMALS IN STOCK</th>
<th>PERCENT STOCK AFFECTED (WITH MITIGATION) &lt;180 dB</th>
<th>PERCENT STOCK AFFECTED (WITH MITIGATION) ≥180 dB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common bottlenose dolphin</td>
<td>Hawaii Pelagic</td>
<td>5,950</td>
<td>0.8241</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td>Kauai/Niihau</td>
<td>184</td>
<td>0.0004</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td>Oahu</td>
<td>743</td>
<td>0.0004</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td>4-Islands</td>
<td>191</td>
<td>0.0004</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td>Hawaii Island</td>
<td>128</td>
<td>0.0004</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Table 4-2. Estimates of the percentage of Hawaii common bottlenose dolphin stocks potentially affected by SURTASS LFA sonar (one mission) in the Hawaii South mission area during spring and fall seasons.

<table>
<thead>
<tr>
<th>MARINE MAMMAL SPECIES</th>
<th>STOCK</th>
<th>NUMBER ANIMALS IN STOCK</th>
<th>PERCENT STOCK AFFECTED (WITH MITIGATION) &lt;180 dB</th>
<th>PERCENT STOCK AFFECTED (WITH MITIGATION) ≥180 dB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common bottlenose dolphin</td>
<td>Hawaii Pelagic</td>
<td>5,950</td>
<td>0.1921</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td>Kauai/Niihau</td>
<td>184</td>
<td>0.0013</td>
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<td></td>
<td>Hawaii Island</td>
<td>128</td>
<td>0.0188</td>
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</table>

4.2.3.1 Summary of Risk Assessment

Analyses to determine the percentage of marine mammal stocks potentially affected (with mitigation) for exposures from 120 to 180 dB re 1 μPa (rms) and ≥180 dB re 1 μPa (rms) have been conducted for the five stocks comprising the Hawaiian Islands Stock Complex of common bottlenose dolphins (Kauai/Niihau, Oahu, 4-Islands, Hawaii Island, and Hawaii Pelagic stocks) in the two proposed North-Central Pacific mission areas for potential SURTASS LFA sonar missions (Tables 4-1 and 4-2).

The results of the Navy’s analysis demonstrate that 0.00% of any stock of Hawaii common bottlenose dolphins would be exposed to sound levels ≥180 dB re 1 μPa (rms) in either mission area. Thus, no common bottlenose dolphins are expected to be affected through injury or mortality from exposure to

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SURTASS LFA sonar transmissions. At exposures of 120 to 180 dB re 1 µPa (rms) (single ping equivalent [SPE])\(^\text{12}\), the overall percentages for any of the five potentially affected Hawaii common bottlenose dolphin stocks range from 0.00% to 0.82% during employment of SURTASS LFA sonar for one modeled mission in each of the proposed two mission areas (Tables 4-1 and 4-2). The highest estimated percentage of any of the five stocks comprising the Hawaiian Islands Stock Complex (Kauai/Niihau, Oahu, 4-Islands, Hawaii Island, and Hawaii Pelagic) of common bottlenose dolphins potentially affected at exposures of 120 to 180 dB re 1 µPa (rms) during employment of SURTASS LFA sonar is 0.8241% of the Hawaii Pelagic stock of common bottlenose dolphins during proposed employment in the Hawaii North mission area. The second highest percentage of any stock potentially affected at SURTASS LFA sonar exposures of 120 to 180 dB re 1 µPa (rms) is 0.1921% of the Hawaii Pelagic stock of common bottlenose dolphins during proposed employment in the Hawaii South mission area. The highest potential impact to any insular stock is 0.0188% of the Hawaii Island stock in the Hawaii South mission area; the remainder of the insular stocks has much lower potential impacts.

4.3 CUMULATIVE IMPACTS

Recent literature provides information regarding oceanic noise levels to which any of the five stocks comprising the Hawaiian Islands Stock Complex (Kauai/Niihau, Oahu, 4-Islands, Hawaii Island, and Hawaii Pelagic) of common bottlenose dolphins may be exposed. Širović et al. (2013) measured ocean noise levels at seven sites in the tropical and subtropical Pacific Ocean, including around the MHI of Kauai and Hawaii Island. Širović et al. (2013) found a seasonal pattern of increased background noise levels of up to 8 dB from January through April due to humpback whale vocalizations at the Kauai site. At both the Kauai and Hawaii Island sites, distant shipping caused an increase of 7 to 13 dB during months in which shipping was reported (Širović et al., 2013). Considering this additional information, together with the analysis of the potential for cumulative impacts of SURTASS LFA sonar when added to ambient noise levels included in the 2012 FSEIS/FSOEIS, which is incorporated herein by reference, and in light of the nominal duty cycle for SURTASS LFA sonar of 7.5 to 10% (the system is nominally off 90 to 92.5% of the time), cumulative impacts from employment of SURTASS LFA sonar are not a reasonably foreseeable significant adverse impact on the five stocks comprising the Hawaiian Islands Stock Complex of common bottlenose dolphins.

4.4 SUMMARY

The potential impacts from SURTASS LFA sonar employment on the five stocks comprising the Hawaiian Islands Stock Complex of common bottlenose dolphins from injury (non-auditory or permanent loss of hearing) under either Alternative 1 or 2 are considered negligible, and the potential impacts from temporary loss of hearing or behavioral change (significant change in a biologically important behavior) are considered minimal. The potential for auditory masking due to exposure to LFA sonar signal transmissions is expected to be minimal and unlikely.

Cumulative impacts from employment of SURTASS LFA sonar are not a reasonably foreseeable significant adverse impact on the five stocks comprising the Hawaiian Islands Stock Complex of common bottlenose dolphins.

Based on the results of the analyses in this document and the three previous NEPA analyses, employment of SURTASS LFA sonar, when employed in accordance with the mitigation measures (geographic restrictions and monitoring/reporting) detailed in the 2012 FSEIS/SOEIS (DoN, 2012),

\(^\text{12}\) The term “Single Ping Equivalent” (SPE) is defined in three previous EISs/SEISs (DoN, 2001, 2007, and 2012). SPE accounts for the energy of all the SURTASS LFA sonar transmissions that a modeled animal receives during an entire simulated LFA sonar mission. Calculating potential impacts is a complex process and the reader is referred to the previous EISs/SEISs for more detail, but SPE is a function of sound pressure level (dB re 1 µPa), not sound exposure level (dB re 1 µPa²-sec).
support a negative impact determination on the five stocks comprising the Hawaiian Islands Stock Complex of common bottlenose dolphins. These results include:

- Potential impacts on the five stocks comprising the Hawaiian Islands Stock Complex of common bottlenose dolphins are expected to be limited to MMPA Level B harassment. The Navy does not expect those effects to impact rates of recruitment or survival on the associated common bottlenose dolphin stocks of Hawaii.

- Navy’s impact analysis does not anticipate any mortality or any injury (MMPA Level A harassment) of the five stocks comprising the Hawaiian Islands Complex of common bottlenose dolphins to occur as a result of SURTASS LFA sonar employment, and the potential to cause strandings is negligible. Thus, impacts on recruitment or survival of the five stocks comprising the Hawaiian Islands Complex of common bottlenose dolphins are expected to be negligible.

- Cumulative impacts are not a reasonably foreseeable adverse impact.

These conclusions are consistent with the selection of Alternative 2 in the August 15, 2012 Record of Decision and do not provide any basis for modifying that decision in any respect.
5.0 PUBLIC AND AGENCY REVIEW PROCESS AND DISTRIBUTION

The CEQ regulations implementing the NEPA (40 CFR §1503.1) as well as Navy guidance on environmental readiness require that agencies solicit comments on DSEISs from Federal and appropriate state agencies in addition to the public. This chapter describes the distribution, review, and comment process for this DSEIS/SEIS.

5.1 REVIEW PROCESS

In the Navy’s Notice of Intent (NOI), published in the Federal Register on 1 July 2014 (DoD, 2014), the Navy, with NMFS as a cooperating agency, announced its intention to prepare a SEIS/SEIS to analyze the potential impact of SURTASS LFA sonar on the five common bottlenose dolphin stocks comprising the Hawaiian Islands Stock Complex. The NOI described the limited purpose of the SEIS/SEIS, which is to remedy the single deficiency identified by a Federal court during recent litigation associated with the Navy’s 2012 FSEIS/SEIS on the global employment of SURTASS LFA sonar (DoN, 2012). The 45-day comment review period for the DSEIS/SEIS was noted in the NOI with a likely timeline of the draft document being available in early fall 2014.

5.1.1 REVIEW PERIOD

Per CEQ regulation (40 CFR §1506.10), a 45-day comment and review period will commence when the U.S. Environmental Protection Agency (USEPA) publishes its Notice of Availability for the DSEIS/SEIS in the Federal Register. The Navy will accept comments from interested members of the public, Federal, and state agencies and organizations on the limited-purpose DSEIS/SEIS only for the duration of this comment period.

5.2 FILING AND DISTRIBUTION OF THE DRAFT SEIS/SEIS

5.2.1 FILING OF DRAFT SEIS/SEIS

Pursuant to Section 102(2) of the NEPA of 1969 as implemented by the CEQ regulations (40 CFR § 1500 to 1508) and EO 12114 (Environmental Effects Abroad of Major Federal Actions), the Navy prepared and filed this DSEIS/SEIS with the USEPA to document the supplemental analyses solely on the potential impacts to the Hawaiian Islands Stock Complex of the common bottlenose dolphin in association with the employment of SURTASS LFA sonar systems.

5.2.2 DISTRIBUTION OF DRAFT SEIS/SEIS

Prior to filing the DSEIS/SEIS with the USEPA and announcing the public availability of the document, copies of the SURTASS LFA Sonar DSEIS/SEIS were distributed to appropriate Federal and state government agencies and officials and other interested parties, as follows.

<table>
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<th>FEDERAL AGENCIES/ORGANIZATION</th>
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</thead>
<tbody>
<tr>
<td>Horst Greczmiel</td>
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<td>Associate Director of NEPA Oversight</td>
</tr>
<tr>
<td>Executive Office of the President</td>
</tr>
<tr>
<td>Council on Environmental Quality</td>
</tr>
<tr>
<td>722 Jackson Place, N.W.</td>
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<tr>
<td>Washington, DC 20503</td>
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October 2014
6.0 LITERATURE CITED


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APPENDIX A: CORRESPONDENCE
From: Schregardus, Donald R SES OASN (EI&E), DASN (Environment)

Sent: Thursday, June 26, 2014 11:46 AM

To: Filipowski, Sean R RDML OPNAV, N2N6F

Cc: Stanley, Tom P CAPT OPNAV, N2/N6F24; MacKinnon, Roderick G CIV OPNAV, N2/N6F24; Morgan, Cynthia V CDR OPNAV, N2/N6F24; Jensen, Craig D CIV OASN (EI&E), AGC EI&E; Landis, James E CDR OASN (EI&E), OAGC EI&E; Cecchini, Joseph D CIV OASN EI&E, JGPO; Fitch, Robin CIV OASN (EI&E), ODASN (Environment); Pierson, John C CIV OASN (EI&E), ODASN (Environment)

Subject: Preparation of Supplemental EIS/OEIS for SURTASS LFA

RDML Filipowski,

In 2012, I reviewed the Final Supplemental Environmental Impact Statement/Supplemental Overseas Environmental Impact Statement (Final SEIS/SOEIS) for the Surveillance Towed Array Sensor System Low Frequency Active (SURTASS LFA) sonar (June 2012) and the 15 August 2012 Record of Decision (ROD) concerning the continued employment of SURTASS LFA sonar. I found that the SEIS/SOEIS analysis and the ROD satisfactorily considered environmental consequences of the decision to employ SURTASS LFA sonar systems globally. However, litigation against the Navy's 2012 SEIS/SOEIS and associated rulemaking under the Marine Mammal Protection Act (MMPA) resulted in the attached judgment (subsequently modified) by the U.S. District Court for the Northern District of California. To satisfy that judgment and a subsequent court order (also attached), and in furtherance of the purposes of the National Environmental Policy Act (NEPA) and Executive Order 12114 (Environmental Effects Abroad of Major Federal Actions), I am directing you to prepare a supplemental analysis to address the specific NEPA deficiency identified by the court. This analysis will take the form of a narrowly-tailored SEIS/SOEIS prepared for the limited purpose of using the best available data for the Hawaiian Islands stocks complex of common bottlenose dolphins.

Please ensure that the supplemental analysis as discussed above complies with both the NEPA and Executive Order 12114. My point of contact for this supplemental analysis is Mr. Dan Cecchini, who can be reached at XXX-XXX-XXXX.

Thank you.

Sincerely,

Don Schregardus
DASN (Environment)
From: Director, Warfare Integration Directorate (N2/N6F)
To: Director, Office of Protected Resources National Marine Fisheries Service, National Oceanic and Atmospheric Administration (NOAA)

Subj: COOPERATING AGENCY REQUEST FOR SURVEILLANCE TOWED ARRAY SENSOR SYSTEM LOW FREQUENCY ACTIVE SONAR SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT/SUPPLEMENTAL OVERSEAS ENVIRONMENTAL IMPACT STATEMENT

Ref: (a) Deputy Assistant Secretary of the Navy (Environment) e-mail to Director, Warfare Integration Directorate (N2/N6F). Subj: Preparation of Supplemental EIS/OEIS for SURTASS LFA, dtd 26 June 2014

1. In reference (a), the Deputy Assistant Secretary of the Navy (Environment) directed the Navy to prepare a supplemental environmental impact statement (SEIS)/supplemental overseas environmental impact statement (SOEIS) for the employment of the Surveillance Towed Array Sensor System Low Frequency Active (SURTASS LFA) sonar. This supplemental analysis is required to address a specific deficiency under the National Environmental Policy Act (NEPA) that was identified in the recent summary judgment order by the U.S. District Court for the Northern District of California that resulted from litigation against the Navy’s 2012 SEIS/SOEIS and associated National Marine Fisheries Service (NMFS) rulemaking under the Marine Mammal Protection Act (MMPA). The Navy’s supplemental analysis will take the form of a narrowly-tailored SEIS/SOEIS prepared for the limited purpose of addressing the deficiency identified in the summary judgment order regarding use of the best available data for the Hawaiian Islands stock complex of common bottlenose dolphins.

2. The Navy requests that the NMFS Office of Protected Resources (OPR) continue to serve as a cooperating agency in accordance with NEPA regulations (40 CFR 1501.6) and the Council on Environmental Quality Cooperating Agency guidance issued on 30 January 2002. The respective responsibilities of Navy and NMFS OPR will be consistent with those described in and agreed to in the cooperating agency correspondence between the two agencies for the 2012 SEIS/SOEIS (dated 24 November 2008 and 6 February 2009).
Subject: COOPERATING AGENCY REQUEST FOR SURVEILLANCE TOWED ARRAY
SENSOR SYSTEM LOW FREQUENCY ACTIVE SONAR SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT/SUPPLEMENTAL OVERSEAS ENVIRONMENTAL IMPACT STATEMENT

3. The Chief of Naval Operations (CNO) point of contact is Commander Cynthia V. Morgan, who may be reached at cynthia.v.morgan@navy.mil or 703.695.8266.

S. R. Filipowski
Rear Admiral, U.S. Navy