

**DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL MARINE FISHERIES SERVICE**

LETTER OF AUTHORIZATION

The Chief of Naval Operations, Department of the Navy, 2000 Navy Pentagon, Washington, D.C. 20350-2000, and individuals operating under their authority (*i.e.*, Navy), are authorized to take marine mammals incidental to Navy operation of Surveillance Towed Array Sensor System Low Frequency Active (SURTASS LFA) sonar in accordance with 50 CFR Part 218, Subpart X– Taking of Marine Mammals Incidental to Navy Operations of SURTASS LFA sonar subject to the provisions of the Marine Mammal Protection Act (16 U.S.C. 1361 *et seq.*; MMPA) and the following Conditions:

1. This Letter of Authorization (Authorization or LOA) is valid for the period August 12, 2019, through August 11, 2026.
2. This Authorization is valid only for the unintentional taking of the species and stocks of marine mammals identified in 50 CFR § 218.230 and Condition 5 of this Authorization governing the taking of these animals incidental to the activities specified in Condition 3. This authorization shall be valid only for takes consistent with the provisions in 50 CFR § 218.232 and the terms of this Authorization as specified herein.
3. This Authorization is valid only for training and testing activities using SURTASS LFA sonar onboard Navy surveillance ships in the central and western North Pacific and eastern Indian Oceans (Study Area). The sound signals transmitted by the SURTASS LFA sonar source must be between 100 and 500 Hertz (Hz) with a source level for each of the 18 projectors of no more than 215 decibels (dB) re: 1 micro Pascal (μPa) at 1 meter (m) (root mean square (rms)) and a maximum duty cycle of 20 percent. LFA sonar transmission hours must not exceed 496 total hours per year across all SURTASS LFA sonar equipped vessels in years 1 through 4 (August 12, 2019 through August 11, 2023), and must not exceed 592 total hours across all SURTASS LFA sonar equipped vessels in years 5 through 7 (August 12, 2023 through August 11, 2026).
4. This Authorization is valid only if the Holder of the Authorization or any person(s) operating under their authority implements the mitigation, monitoring, and reporting required pursuant to 50 CFR §§ 218.234, 218.235, and 218.236 and implements the Terms and Conditions of this Authorization.

SPECIES AUTHORIZED AND LEVEL OF TAKE

5. The incidental take of marine mammals under the activity identified in Condition 3 of this Authorization is limited to the species and stocks identified in 50 CFR § 218.230 listed in Table 1.

Table 1. Species/Stocks Authorized for Take by Level B Harassment by SURTASS LFA Sonar Training and Testing Activities.

Species	Stock¹
Antarctic minke whale	ANT
Blue whale	CNP
	NIND
	WNP
	SIND
Bryde's whale	ECS
	Hawaii
	WNP
	NIND
Common minke whale	SIND
	Hawaii
	IND
	WNP JW
Fin whale	WNP OE
	YS
	ECS
	Hawaii
	IND
Humpback whale	SIND
	WNP
	CNP stock and Hawaii DPS
North Pacific right whale	WAU stock and DPS
	WNP stock and DPS
	WNP
Omura's whale	NIND
	SIND
	WNP
Sei whale	Hawaii
	SIND
	NP
	NIND
Western North Pacific gray whale	WNP stock and Western DPS
Baird's beaked whale	WNP
Blainville's beaked whale	Hawaii

Species	Stock ¹	
	WNP	
	IND	
Common bottlenose dolphin	4-Islands	
	Hawaii Island	
	Hawaii Pelagic	
	IA	
	IND	
	Japanese Coastal	
	Kauai/Niihau	
	Oahu	
	WNP Northern Offshore	
	WNP Southern Offshore	
	WAU	
	Common dolphin	IND
		WNP
Cuvier's beaked whale	Hawaii	
	IND	
	SH	
	WNP	
Dall's porpoise	SOJ <i>dalli</i> type	
	WNP <i>dalli</i> ecotype	
	WNP <i>truei</i> ecotype	
Deraniyagala's beaked whale	IND	
	NP	
Dwarf sperm whale	Hawaii	
	IND	
	WNP	
False killer whale	Hawaii Pelagic	
	IA	
	IND	
	Main Hawaiian Islands Insular stock and DPS	
	Northwestern Hawaiian Islands	
	WNP	
Fraser's dolphin	CNP	
	Hawaii	
	IND	
	WNP	
Ginkgo-toothed beaked whale	IND	

Species	Stock ¹
	NP
Harbor porpoise	WNP
Hubbs' beaked whale	NP
Indo-Pacific bottlenose dolphin	IND
Killer whale	Hawaii
	IND
	WNP
<i>Kogia</i> spp.	WNP
Longman's beaked whale	Hawaii
	IND
	WNP
Melon-headed whale	Hawaiian Islands
	IND
	Kohala Resident
	WNP
<i>Mesoplodon</i> spp.	WNP
Northern right whale dolphin	NP
Pacific white-sided dolphin	NP
Pantropical spotted dolphin	4-Islands
	Hawaii Island
	Hawaiian Pelagic
	IND
	Oahu
	WNP
Pygmy killer whale	Hawaii
	IND
	WNP
Pygmy sperm whale	Hawaii
	IND
	WNP
Risso's dolphin	Hawaii
	IA
	WNP
	IND
Rough-toothed dolphin	Hawaii
	IND
	WNP
Short-finned pilot whale	Hawaii

Species	Stock ¹
	IND
	WNP Northern Ecotype
	WNP Southern Ecotype
Southern bottlenose whale	IND
Spade-toothed beaked whale	IND
Sperm whale	Hawaii
	NIND
	NP
	SIND
Spinner dolphin	Hawaii Island
	Hawaii Pelagic
	IND
	Kauai/Niihau
	Kure/Midway Atoll
	Oahu/4-Islands
	Pearl and Hermes Reef
Stejneger's beaked whale	WNP
Striped dolphin	Hawaii
	IND
	Japanese Coastal
	WNP Northern Offshore
	WNP Southern Offshore
Hawaiian monk seal	Hawaii
Northern fur seal	Western Pacific
Ribbon seal	NP
Spotted seal	Alaska stock/Bering Sea DPS
	Southern stock and DPS
Steller sea lion	Western/Asian stock and Western DPS

¹ ANT=Antarctic; CNP=Central North Pacific; NP=North Pacific; NIND=Northern Indian; SIND=Southern Indian; IND=Indian; WNP=Western North Pacific; ECS=East China Sea; WP=Western Pacific; SOJ=Sea of Japan; IA=Inshore Archipelago; WAU=Western Australia; YS=Yellow Sea; OE=Offshore Japan; OW=Nearshore Japan; JW=Sea of Japan/Minke; JE=Pacific coast of Japan; SH=Southern Hemisphere; DPS=distinct population segment

- The taking of marine mammals by the Holder of this Authorization is limited to the incidental taking of marine mammal species and stocks identified in Condition 5 by Level B harassment (as defined in the MMPA and 50 CFR § 216.3) within those areas authorized under Condition 3. The take, by Level B harassment, that occurs during any single year covered by this Authorization must not exceed the amount authorized for each marine mammal stock listed in Condition 5 (see Authorized Take in Table 1 in Attachment 1).

7. Taking of marine mammal species not listed under Condition 5 by harassment, injury, or mortality or the taking by Level A harassment or mortality of any marine mammal species listed under Condition 5 is prohibited.

MITIGATION

8. The Holder of this Authorization, and any individuals operating under their authority, must conduct the activity identified in 50 CFR § 218.230 and Condition 3 of this Authorization in a manner that minimizes, to the greatest extent practicable, adverse impacts on marine mammals, their habitats, and the availability of marine mammals for subsistence uses.

When conducting operations identified in 50 CFR § 218.230, the following mitigation measures must be implemented:

- (a) *Personnel training - lookouts.* The Holder of this Authorization, and any individuals operating under their authority must utilize one or more trained marine biologists qualified in conducting at-sea marine mammal visual monitoring to conduct at-sea marine mammal visual monitoring training and qualify designated ship personnel to conduct at-sea visual monitoring. Training will ensure quick and effective communication within the command structure in order to facilitate implementation of protective measures if they detect marine mammals and may be accomplished either in-person, or via video training.
- (b) *General operating procedures.*
 - i. Prior to SURTASS LFA sonar activities, the Holder of this Authorization, and any individuals operating under their authority, must promulgate executive guidance for the administration, execution, and compliance with the environmental regulations under these regulations and LOA.
 - ii. The SURTASS LFA sonar signal must not be transmitted at a frequency greater than 500 Hz.
- (c) *2,000-yard LFA sonar mitigation zone; suspension and delay.* If a marine mammal is detected, through monitoring required under § 218.235 and Condition 9, within or about to enter within 2,000 yards of the SURTASS LFA source (*i.e.*, the LFA sonar mitigation zone), the Holder of this Authorization, and any individuals operating under their authority must immediately delay or suspend SURTASS LFA sonar transmissions.
- (d) *Resumption of SURTASS LFA sonar transmissions.* The Holder of this Authorization, and any individuals operating under their authority may not resume SURTASS LFA sonar transmissions earlier than 15 minutes after:

- i. All marine mammals have left the area of the 2,000-yard LFA sonar mitigation zone; and
 - ii. There is no further detection of any marine mammal within the 2,000-yard LFA sonar mitigation zone as determined by the visual, passive acoustic, and active acoustic high frequency monitoring described in § 218.235 and Condition 9.
- (e) Ramp-up procedures for the high-frequency marine mammal monitoring (HF/M3) sonar required under § 218.235 and Condition 9(c).
 - i. The Holder of this Authorization, and any individuals operating under their authority, must ramp up the High Frequency Marine Mammal Monitoring (HF/M3) power level beginning at a maximum source sound pressure level of 180 dB: re 1 μ Pa at 1 meter in 10-dB increments to operating levels over a period of no less than five minutes:
 - 1. At least 30 minutes prior to any SURTASS LFA sonar transmissions; and
 - 2. Anytime after the HF/M3 source has been powered down for more than two minutes.
 - ii. The Holder of this Authorization, and any individuals operating under their authority, must not increase the HF/M3 sonar 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. LFA sonar training and testing activities must be conducted such that:
 - i. The received level of SURTASS LFA sonar transmissions will not exceed 180 dB re: 1 μ Pa rms within 22 kilometers (km) (12 nautical miles (nmi)) from any emergent land, including offshore islands;
 - ii. The received level of SURTASS LFA sonar transmissions will not exceed 180 dB re: 1 μ Pa rms at a distance of 1 km (0.5 nmi) seaward of the outer perimeter of any Offshore Biologically Important Area (OBIA) designated in the Study Area for SURTASS LFA sonar (Table 2), or subsequently identified through the Adaptive Management process specified in § 218.238, during the period specified. The boundaries and periods of such OBIA's will be kept on file in NMFS' Office of Protected Resources and on its website at <https://www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-military-readiness-activities>.

- iii. No more than 25 percent of the authorized amount (transmission hours) of SURTASS LFA sonar for training and testing will be conducted within 10 nmi (18.5 km) of any single OBIA during any year (no more than 124 hours in years 1 - 4 and 148 hours in years 5 - 7) unless the following conditions are met: Should national security present a requirement to conduct more than 25 percent of authorized hours of SURTASS LFA sonar within 10 nmi (18.5 km) of any single OBIA during any year, naval units will obtain permission from the appropriate designated Command authority prior to commencement of the activity. The Holder of this Authorization, and any individuals operating under their authority, must provide NMFS with notification as soon as is practicable and include the information (*e.g.*, sonar hours) in its annual activity reports submitted to NMFS.
- iv. No activities with the SURTASS LFA system will occur within territorial seas of foreign nations, which are areas from 0 up to 12 nmi from shore, depending on the distance that individual nations claim; and
- v. No activities with the SURTASS LFA sonar system will occur in the waters of Penguin Bank, Hawaii (defined as water depth of 600 feet (ft) (183 m)), and ensonification of Hawaii state waters (out to 3 nmi) will not exceed 145 dB re: 1 μ Pa rms.

Table 2. Offshore Biologically Important Areas (OBIA).

OBIA Name	Ocean Area	Effective Seasonal Period
Main Hawaiian Islands	Central North Pacific	November to April
Northwestern Hawaiian Islands	Central North Pacific	December to April
Mariana Islands	Western North Pacific	February to April
Ryukyu-Philippines	Western North Pacific	January to April
Ogasawara Islands (Sperm Whale)	Western North Pacific	June to September
Ogasawara-Kazin Islands (Humpback Whale)	Western North Pacific	December to May
Honshu	Western North Pacific	January to May
Southeast Kamchatka	Western North Pacific	June to September
Gulf of Thailand	Eastern Indian Ocean	April to November
Western Australia (Blue Whale)	Eastern Indian Ocean	May to November
Western Australia (Humpback Whale)	Eastern Indian Ocean	May to December
Southern Bali	Eastern Indian Ocean	October to November
Swatch-of-No-Ground (SoNG)	Northern Bay of Bengal	Year-round
Sri Lanka	Eastern Indian Ocean	October to April

- (g) Minimization of additional harm to live-stranded (or milling) mammals. The Navy must consult the Notification and Reporting Plan, which sets out the requirements for when live stranded marine mammals are reported in the Study Area. The Stranding and Notification Plan is available at: <https://www.fisheries.noaa.gov/action/incidental-take-authorization-us-navy-operations-surveillance-towed-array-sensor-system-0>

MONITORING

9. The Holder of this Authorization, and any individuals operating under his authority, must:

(a) Perform the following for visual mitigation monitoring:

- i. Marine mammal biologists qualified in conducting at-sea marine mammal visual monitoring from surface vessels will train and qualify designated ship personnel as lookouts to conduct at-sea visual monitoring.
- ii. Marine mammal biologists will train the lookouts in the most effective means to ensure quick and effective communication within the ship's command structure to facilitate implementation of protective measures if they observe marine mammals.
- iii. Conduct visual monitoring from the ship's bridge during all daylight hours (30 minutes before sunrise until 30 minutes after sunset). During training and testing activities that employ SURTASS LFA sonar in the active mode, the SURTASS vessels must have Lookouts to maintain a topside watch with standard binoculars (7x) and with the naked eye. If the lookout sights a possible marine mammal, the lookout will use big-eye binoculars (25x) to confirm the sighting and potentially identify the marine mammal species.

(b) Perform the following for passive acoustic mitigation monitoring:

- i. Use the low frequency, passive SURTASS sonar system to listen for vocalizing marine mammals.

(c) Perform the following for active acoustic mitigation monitoring:

- i. 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 § 218.234(e) and Condition 8(e).

10. Mitigation monitoring under Conditions 9(a), (b), and (c) must:

- (a) Commence at least 30 minutes before the first SURTASS LFA sonar transmission (30 minutes before sunrise for visual monitoring);

- (b) Continue between sonar transmissions (pings); and
 - (c) Continue either at least 15 minutes after completion of SURTASS LFA sonar training and testing transmission (30 minutes after sunset for visual monitoring), or, if marine mammals are exhibiting unusual changes in behavioral patterns, until behavior patterns return to normal or conditions prevent continued observations.
11. The Holder of this Authorization and any individuals operating under their authority for activities described in 50 CFR § 218.230 must:
- (a) Cooperate with NMFS and any other federal agency for monitoring the impacts of the activity on marine mammals; and
 - (b) Designate qualified on-site individuals to conduct the mitigation, monitoring, and reporting activities specified in this LOA.
12. The Holder of this Authorization and any individuals operating under their authority, will conduct all monitoring required under the LOA to increase knowledge of the affected marine mammal species. The Holder of this Authorization must:
- (a) 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; and
 - (b) 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.

REPORTING

13. The Holder of this Authorization and any individuals operating under their authority, must:
- (a) Submit classified and unclassified annual training and testing activity reports to the Director, Office of Protected Resources, NMFS, no later than 90 days after the end of each year covered by the LOA beginning on the date of effectiveness of the LOA. Each annual training and testing activity report will include a summary of all active-mode training and testing activities completed during that year. At a minimum, each training and testing activity report must contain the following information:
 - i. Dates, times, and location of each vessel during each training and testing activity;

- ii. Information on sonar transmissions during each training and testing activity and records of any delays or suspensions of activity;
 - iii. Results of the marine mammal monitoring program. Marine mammal observations including animal type and/or species, number of animals sighted, date and time of observations, type of detection (visual, passive acoustic, HF/M3 sonar), bearing and range from vessel, unusual behavior (if any), and remarks/narrative (as necessary); and
 - iv. Estimates of the percentages of marine mammal stocks affected (both for the year and cumulatively for each successive year) by SURTASS LFA sonar operations (both within and outside the LFA sonar mitigation zone), using predictive modeling based on mission locations, dates/times of operations, system characteristics, LFA sonar transmission durations, oceanographic environmental conditions, and animal demographics (classified report only).
- (b) The seventh annual report must be prepared as a final comprehensive report, which will include information for the final year as well as the prior six years of activities under the rule, and be submitted to the Director, Office of Protected Resources, NMFS. In addition to the information described in Condition 13(a), the comprehensive report must include:
- i. 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;
 - ii. An analysis of the effectiveness of the mitigation measures with recommendations for improvements, where applicable;
 - iii. An assessment of any long-term effects from SURTASS LFA sonar operations; and
 - iv. Any discernible or estimated cumulative impacts from SURTASS LFA sonar operations.
- (c) 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.
- (d) Consult the Notification and Reporting Plan, which sets out notification, reporting, and other requirements for when dead, injured, or live stranded marine mammals are reported in the Study Area. The Stranding and Notification Plan is available at: <https://www.fisheries.noaa.gov/action/incidental-take-authorization-us-navy-operations-surveillance-towed-array-sensor-system-0>

14. Prohibitions. Notwithstanding the takings identified in Condition 5 of this LOA and authorized under this LOA and 50 CFR Part 218, Subpart X, no person in connection with the activities described in Condition 3 of this Authorization may take any marine mammal specified in Condition 5 of this Authorization other than by incidental take and in the course of conducting the activities specified in Condition 3; take any marine mammal other than a species or stock identified in Condition 5; take a marine mammal specified in Condition 5 if such taking results in more than a negligible impact on the species or stock of such marine mammal; or violate, or fail to comply with, the terms, conditions, and requirements of the regulations or this LOA.

15. Renewals and modification of a Letter of Authorization.

(a) An LOA issued under 50 CFR §§ 216.106 and 218.237 for the activities identified in Condition 3 of this Authorization and § 218.70 of the regulations may be renewed or modified upon request by the applicant, provided that:

- i. The planned specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for the regulations (excluding changes made pursuant to the adaptive management provision in Condition 16(a) of this Authorization); and
- ii. NMFS determines that the mitigation, monitoring, and reporting measures required by the previous LOA(s) were implemented.

(b) For LOA modification or renewal requests by the applicant that include changes to the activity or to the mitigation, monitoring, or reporting measures (excluding changes made pursuant to the adaptive management provision of this Authorization) that do not change the findings made for the regulations or result in no more than a minor change in the total estimated number of takes (or distribution by species or stock or years), NMFS may publish a notice of planned LOA in the *Federal Register*, including the associated analysis of the change, and solicit public comment before issuing the LOA.

16. An LOA issued under 50 CFR §§ 216.106 and 218.237 may be modified by NMFS under the following circumstances:

(a) Adaptive management. After consulting with the Navy regarding the practicability of the modifications, NMFS may modify (including adding or removing measures) the existing mitigation, monitoring, or reporting measures if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring.

- i. Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA include:

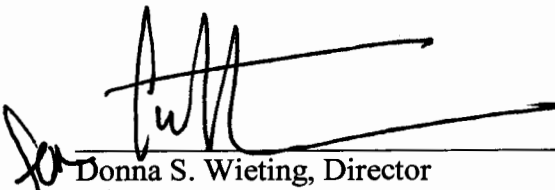
1. Results from the Navy's monitoring from the previous year(s);
2. Results from other marine mammal and/or sound research or studies;
or
3. Any information that reveals marine mammals may have been taken in a manner, extent, or number not authorized by the regulations LOAs.

ii. If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS will publish a notice of planned LOA in the *Federal Register* and solicit public comment.

(b) Emergencies. 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 LOAs issued pursuant to §§ 216.106 and 218.237, an LOA may be modified without prior notice or opportunity for public comment. Notice would be published in the *Federal Register* within thirty days of the action.

17. The Holder of this Authorization and any person operating under their authority must comply with the Terms and Conditions of the Incidental Take Statement corresponding to NMFS' Biological Opinion for the activities identified in Condition 3 as they pertain to Endangered Species Act listed marine mammals.

18. A copy of this Authorization or a document containing the equivalent requirements specified in this Authorization and the 50 CFR Part 218, Subpart X regulations, must be in the possession of the on-site Commanding Officer in order to take marine mammals under the authority of this Authorization and Incidental Take Statement while conducting the specified activities.



Donna S. Wieting, Director
Office of Protected Resources
National Marine Fisheries Service

AUG 12 2019

Date

Attachment 1 – Authorized Take

The Holder of this Authorization must maintain a running calculation/estimation of takes of each species/stock over the effective period of this Authorization. The take, by Level B harassment, that occurs during the year covered by this Authorization may not exceed the amount authorized for any marine mammal stock as described in Table 1 below.

Table 1. Maximum Total Annual MMPA Level B Harassment Take Authorized for Years 1 - 4 and 5 - 7, and Total for the Seven-year Period of the Final Rule by SURTASS LFA Sonar Training and Testing Activities.

Species	Stock ¹	Maximum Annual Level B Harassment, Years 1-4	Maximum Annual Level B Harassment, Years 5-7	Total Overall Level B Harassment for 7-year Period
Antarctic minke whale	ANT	0	0	0
Blue whale	CNP	3	4	24
	NIND	0	1	3
	WNP	90	123	729
	SIND	1	1	7
Bryde's whale	ECS	14	19	113
	Hawaii	5	6	38
	WNP	378	437	2,823
	NIND	8	10	62
	SIND	7	9	55
Common minke whale	Hawaii	572	682	4,334
	IND	1,271	1,748	10,328
	WNP JW	3	5	27
	WNP OE	2,127	2,404	15,720
	YS	189	250	1,506
Fin whale	ECS	9	12	72
	Hawaii	3	4	24
	IND	0	0	0
	SIND	22	30	178
	WNP	2,558	3,455	20,597
Humpback whale	CNP stock and Hawaii DPS	487	611	3,781
	WAU stock and DPS	1	1	7
	WNP stock	3,103	4,266	25,210

Species	Stock ¹	Maximum Annual Level B Harassment, Years 1-4	Maximum Annual Level B Harassment, Years 5-7	Total Overall Level B Harassment for 7-year Period
	and DPS			
North Pacific right whale	WNP	89	122	722
Omura's whale	NIND	8	10	62
	SIND	5	7	41
	WNP	14	16	104
Sei whale	Hawaii	19	22	142
	SIND	0	0	0
	NP	3,172	4,361	25,771
	NIND	4	5	31
Western North Pacific gray whale	WNP stock and Western DPS	0	1	3
Baird's beaked whale	WNP	2,747	3,777	22,319
Blainville's beaked whale	Hawaii	35	47	281
	WNP	269	311	2,009
	IND	47	65	383
Common bottlenose dolphin Common bottlenose dolphin	4-Islands	5	6	38
	Hawaii Island	0	0	0
	Hawaii Pelagic	95	114	722
	IA	104	140	836
	IND	1,128	1,551	9,165
	Japanese Coastal	1,686	1,789	12,111
	Kauai/Niihau	13	16	100
	Oahu	38	46	290
	WNP Northern Offshore	581	799	4,721
	WNP Southern Offshore	2,726	3,063	20,093
	WAU	635	873	5,159
Common dolphin	IND	52	72	424
	WNP	203,871	275,079	1,640,721
Cuvier's beaked whale	Hawaii	22	26	166
	IND	231	317	1,875
	SH	77	106	626

Species	Stock ¹	Maximum Annual Level B Harassment, Years 1-4	Maximum Annual Level B Harassment, Years 5-7	Total Overall Level B Harassment for 7-year Period
	WNP	6,946	8,980	54,724
Dall's porpoise	SOJ dalli type	614	845	4,991
	WNP dalli ecotype	22,056	30,327	179,205
	WNP truei ecotype	487	670	3,958
Deraniyagala's beaked whale	IND	158	217	1,283
	NP	342	412	2,620
Dwarf sperm whale	Hawaii	655	782	4,966
	IND	3	4	24
	WNP	486	635	3,849
False killer whale	Hawaii Pelagic	58	69	439
	IA	252	341	2,031
	IND	12	16	96
	Main Hawaiian Islands Insular stock and DPS	1	1	7
	Northwestern Hawaiian Islands	0	0	0
	WNP	1,350	1,596	10,188
Fraser's dolphin	CNP	546	686	4,242
	Hawaii	1,944	2,320	14,736
	IND	93	128	756
	WNP	2,287	2,559	16,825
Ginkgo-toothed beaked whale	IND	12	16	96
	NP	476	568	3,608
Harbor porpoise	WNP	366	503	2,973
Hubbs' beaked whale	NP	26	36	212
Indo-Pacific bottlenose dolphin	IND	11	16	92

Species	Stock¹	Maximum Annual Level B Harassment, Years 1-4	Maximum Annual Level B Harassment, Years 5-7	Total Overall Level B Harassment for 7-year Period
Killer whale	Hawaii	6	8	48
	IND	397	546	3,226
	WNP	10,470	14,387	85,041
<i>Kogia</i> spp.	WNP	1,317	1,494	9,750
Longman's beaked whale	Hawaii	739	882	5,602
	IND	325	447	2,641
	WNP	471	574	3,606
Melon-headed whale	Hawaiian Islands	181	216	1,372
	IND	402	552	3,264
	Kohala Resident	9	11	69
	WNP	1,605	1,823	11,889
<i>Mesoplodon</i> spp.	WNP	10	14	82
Northern right whale dolphin	NP	0	0	0
Pacific white-sided dolphin	NP	9,530	12,890	76,790
Pantropical spotted dolphin	4-Islands	32	38	242
	Hawaii Island	23	27	173
	Hawaiian Pelagic	297	355	2,253
	IND	311	428	2,528
	Oahu	23	28	176
	WNP	5,105	5,883	38,069
Pygmy killer whale	Hawaii	393	469	2,979
	IND	60	82	486
	WNP	901	1,035	6,709
Pygmy sperm whale	Hawaii	266	318	2,018
	IND	0	0	0
	WNP	203	265	1,607
Risso's dolphin	Hawaii	414	494	3,138
	IA	1,045	1,374	8,302
	WNP	4,347	4,914	32,130
	IND	4,621	6,354	37,546
Rough-toothed	Hawaii	213	254	1,614

Species	Stock¹	Maximum Annual Level B Harassment, Years 1-4	Maximum Annual Level B Harassment, Years 5-7	Total Overall Level B Harassment for 7-year Period
dolphin	IND	41	57	335
	WNP	1,439	1,732	10,952
Short-finned pilot whale	Hawaii	396	473	3,003
	IND	1,526	2,098	12,398
	WNP Northern Ecotype	525	721	4,263
	WNP Southern Ecotype	5,683	6,303	41,641
Southern bottlenose whale	IND	22	31	181
Spade-toothed beaked whale	IND	16	22	130
Sperm whale	Hawaii	106	126	802
	NIND	33	46	270
	NP	1,429	1,855	11,281
	SIND	16	22	130
Spinner dolphin	Hawaii Island	1	1	7
	Hawaii Pelagic	192	229	1,455
	IND	240	330	1,950
	Kauai/Niihau	83	99	629
	Kure/Midway Atoll	0	0	0
	Oahu/4-Islands	20	24	152
	Pearl and Hermes Reef	0	0	0
	WNP	574	721	4,459
Stejneger's beaked whale	WNP	201	276	1,632
Striped dolphin	Hawaii	269	321	2,039
	IND	5,059	6,957	41,107
	Japanese Coastal	3,366	3,571	24,177
	WNP Northern Offshore	267	367	2,169
	WNP Southern Offshore	3,282	3,729	24,315
Hawaiian monk	Hawaii	10	13	79

Species	Stock¹	Maximum Annual Level B Harassment, Years 1-4	Maximum Annual Level B Harassment, Years 5-7	Total Overall Level B Harassment for 7-year Period
seal				
Northern fur seal	Western Pacific	8,475	11,653	68,859
Ribbon seal	NP	15,705	21,595	127,605
Spotted seal	Alaska stock/Bering Sea DPS	80,722	110,993	655,867
	Southern stock and DPS	0	1	3
Steller sea lion	Western/Asian stock, Western DPS	2	3	17

¹ ANT=Antarctic; CNP=Central North Pacific; NP=North Pacific; NIND=Northern Indian; SIND=Southern Indian; IND=Indian; WNP=Western North Pacific; ECS=East China Sea; WP=Western Pacific; SOJ=Sea of Japan; IA=Inshore Archipelago; WAU=Western Australia; YS=Yellow Sea; OE=Offshore Japan; OW=Nearshore Japan; JW=Sea of Japan/Minke; JE=Pacific coast of Japan; SH=Southern Hemisphere; DPS=distinct population segment