

APPENDIX I

REQUIRED TAKE TABLES FOR THE ESA/MMPA PERMIT APPLICATION

Table 1. Activities representatives of the National Marine Fisheries Service's Marine Mammal Health and Stranding Response Program would be authorized to conduct under the proposed permit

Species	Life Stage	Gender	Expected Number of Individuals "Taken" ¹	Number of Times an Individual Might be "Taken"	Proposed Action	Transport	Location	Dates/Time Period
Project 1: Emergency Response Activities								
All ESA-listed Cetacea, all ESA-listed Pinnipedia under NMFS jurisdiction	All (no restriction on age class)	M/F	As warranted to respond to emergencies*	As warranted to respond to emergencies ²	Close approach, aerial and vessel surveys, disentanglement, capture, restraint, handling, tagging, marking (excluding hot branding), sample collection (including biopsy), sample analysis, anesthesia, sedation, treatment, import/export of animals, transport, relocation, rehabilitation, release, hazing away from harmful situations; and acoustic sampling, recording, and playbacks	Live animals may be transported to rehabilitation facilities and release sites. Live animals may be relocated	Beaches, coastal waters of the US, waters within the US EEZ, and international waters (for export); import/export animals world-wide	All/continuous
All ESA-listed Cetacea, all ESA-listed Pinnipedia under NMFS jurisdiction	All	M/F	As warranted to respond to emergencies*	As warranted to respond to emergencies*	Euthanasia, necropsy, carcass disposal	Carcasses may be transported to disposal sites or laboratories	Beaches, coastal waters of the US, and waters within the US EEZ	All/continuous
All ESA-listed Cetacea, all ESA-listed Pinnipedia under NMFS jurisdiction	All	M/F	As warranted to respond to emergencies*	As warranted to respond to emergencies*	Accidental mortality, necropsy, carcass disposal	Carcasses may be transported to disposal sites or laboratories	Beaches, coastal waters of the US, and waters within the US EEZ	All/continuous
All Cetacea, all Pinnipedia (including walrus), sea otter, manatee, and polar bear ³	All	M/F	As warranted to respond to emergencies*	As warranted to respond to emergencies*	Incidental harassment	N/A	Beaches, coastal waters of the US, and waters within the US EEZ	All/continuous

Table 1. Activities representatives of the National Marine Fisheries Service's Marine Mammal Health and Stranding Response Program would be authorized to conduct under the proposed permit

Species	Life Stage	Gender	Expected Number of Individuals "Taken" ¹	Number of Times an Individual Might be "Taken"	Proposed Action	Transport	Location	Dates/Time Period
All Cetacea, all Pinnipedia (including walrus), sea otter, manatee, dugong, and polar bear ³	All	M/F	As warranted to respond to emergencies*	As warranted to respond to emergencies*	Receipt, import/export of samples	Analytical and diagnostic samples may be transported, imported or exported as needed to laboratories	Beaches, coastal waters of the US, waters within the US EEZ, and international waters; world-wide import /export	All/continuous
Project 2: Prospective Health Assessment Research Activities								
Pinnipedia (except Guadalupe fur seal, Hawaiian monk seal, and Steller sea lion)	All	M/F	Unlimited	5	Close approach, aerial and vessel surveys	None	Coastal waters of the US, US EEZ, international waters	All
Pinnipedia (except Guadalupe fur seal, Hawaiian monk seal, and Steller sea lion)	All	M/F	Up to 300 annually (total)	5	Capture (net or hand), restraint, handling, tagging, marking (excluding hot branding), sample collection (including biopsy), release; and acoustic sampling, recording, and playbacks	None	Coastal waters of the US, US EEZ, international waters	All
Pinnipedia (except Guadalupe fur seal, Hawaiian monk seal, and Steller sea lion)	All	M/F	3 annually (total)	1	Accidental mortality during capture activities	None	Coastal waters of the US, US EEZ, international waters	All
Pinnipedia (except Guadalupe fur seal, Hawaiian monk, seal and Steller sea lion)	All	M/F	Up to 400 annually (total)	5	Collection of samples during other legal takes/permitted activities (subsistence harvest, by-catch, live capture/release)	None	Coastal waters of the US, US EEZ, international waters	All
ESA-listed Hawaiian monk seals and Guadalupe fur seals that are held in captivity and are not releasable back into the wild; and those undergoing rehabilitation	All	M//F	As warranted to satisfy the requirements of study design	As warranted to satisfy the requirements of study design	Capture (net or hand), restraint, handling, tagging, marking (excluding hot branding), sample collection (including biopsy), release; and acoustic sampling, recording, and playbacks	None	Captive holding facilities including rehabilitation centers	All

Table 1. Activities representatives of the National Marine Fisheries Service's Marine Mammal Health and Stranding Response Program would be authorized to conduct under the proposed permit

Species	Life Stage	Gender	Expected Number of Individuals "Taken" ¹	Number of Times an Individual Might be "Taken"	Proposed Action	Transport	Location	Dates/Time Period
Small Cetacea (<i>Tursiops</i> , <i>Stenella</i> , <i>Steno</i> , <i>Delphinus</i> , <i>Lagenorhynchus</i> , <i>Lagenodelphis</i> , <i>Lissodelphis</i> , <i>Grampus</i> , <i>Peponocephala</i> , <i>Feresa</i> , <i>Pseudorca</i> , <i>Orcinus</i> , <i>Globicephala</i> , <i>Phocoena</i> , <i>Phocoenoides</i> , <i>Kogia</i> , <i>Delphinaterus</i> , all beaked whales)	All	M/F	Unlimited	5	Close approach, aerial and vessel surveys	None	Coastal waters of the US, US EEZ, international waters	All
Small Cetacea (see above)	All except YOY	M/F	Up to 200 annually (total)	5	Capture (net or hand), restraint, handling, tagging, marking (including freeze branding), sample collection, release; and acoustic sampling, recording, and playbacks	None	Coastal waters of the US, US EEZ, international waters	All
Small Cetacea (see above)	All except YOY	M/F	3 annually (total)	1	Accidental mortality during capture activities	None	Coastal waters of the US, US EEZ, international waters	All
Small Cetacea (see above)	All except YOY	M/F	Up to 400 annually (total)	5	Collection of samples during other legal takes/permitted activities (subsistence harvest, by-catch, live capture/release)	None	Coastal waters of the US, US EEZ, international waters	All
Large Whales (gray, right, humpback, fin, blue, sei, Bryde's, minke, bowhead, and sperm whales)	All except calves ≤ 6 months in age and cows with calves	M/F	Up to 5,000 annually (total)	5	Close approach, aerial and vessel surveys	None	Coastal waters of the US, US EEZ, international waters	All
Large Whales (same species as the previous entry)	All except calves ≤ 6 months in age and cows with calves (for	M/F	Up to 100 annually (total)	5	Tagging and sample collection (including biopsy and respiratory gases), acoustic sampling (including recording and playback	None	Coastal waters of the US, US EEZ, international waters	All

Table 1. Activities representatives of the National Marine Fisheries Service's Marine Mammal Health and Stranding Response Program would be authorized to conduct under the proposed permit

Species	Life Stage	Gender	Expected Number of Individuals "Taken" ¹	Number of Times an Individual Might be "Taken"	Proposed Action	Transport	Location	Dates/Time Period
	tagging and sampling)				experiments), collection of feces, photo-identification (for visual health assessment and ID)			
Large Whales (same species as the previous entry)	All	M/F	Up to 400 annually (total)	5	Collection of samples during other lawful "takes"/permitted activities (subsistence harvest, by-catch, live takes)	None	Coastal waters of the US, US EEZ, international waters	All
All Cetacea, all Pinnipedia (including walrus), marine and sea otter, manatee, dugong, and polar bear	All	M/F	As warranted to satisfy the requirements of study design	As warranted to satisfy the requirements of study design	Receipt, import/export of samples	Analytical and diagnostic samples may be transported, imported or exported as needed to laboratories	Beaches, coastal waters of the US, waters within the US EEZ, and international waters; world-wide import /export	All/continuous

Project 3: Cognitive Assessment of Sea Lions in Rehabilitation with Domoic Acid Intoxication

<i>Zalophus californianus</i>	All	M/F	Up to 50 domoic acid exposed animals and up to 50 controls (total)	30 (up to 1/day)	Restraint, handling, and sample collection	Animals may be transported to Long Marine Laboratory.	Animals in rehabilitation at The Marine Mammal Center	Period for each animal- up to 30 days. Entire study- Over 5 years
<i>Zalophus californianus</i>	All	M/F	Up to 50 domoic acid exposed animals (total)	1	Accidental mortality during research activities	None	Animals in rehabilitation at The Marine Mammal Center	Entire study- Over 5 years

1 The ESA defines "take" as "harass, harm, pursue, hunt, shoot, would, kill, trap, capture, or collect, or attempt to engage in any such conduct" (16 U.S.C. 1532).

2. Due to the nature of stranding and entanglement events, the specific numbers of individuals that might be "taken" during responses to these events cannot be determined in advance

3. dugongs, manatees, polar bears, sea otters, and walruses are under the jurisdiction of the U.S. Fish and Wildlife Service and are not addressed in this biological opinion

Table 2. Activities representatives of the National Marine Fisheries Service's Marine Mammal Health and Stranding Response Program would be authorized to conduct on endangered or threatened species under the proposed permit

Species	Life Stage	Gender	Expected Number of Individuals "Taken" ¹	Number of Times an Individual Might be "Taken"	Proposed Action	Transport	Location	Dates/Time Period
Project 1: Emergency Response Activities								
All ESA-listed Cetacea, all ESA-listed Pinnipedia under NMFS jurisdiction	All (no restriction on age class)	M/F	As warranted to respond to emergencies ²	As warranted to respond to emergencies*	Close approach, aerial and vessel surveys, disentanglement, capture, restraint, handling, tagging, marking (excluding hot branding), sample collection (including biopsy), sample analysis, anesthesia, sedation, treatment, import/export of animals, transport, relocation, rehabilitation, release; hazing away from harmful situations; and acoustic sampling, recording, and playbacks	Live animals may be transported to rehabilitation facilities and release sites. Live animals may be relocated	Beaches, coastal waters and EEZ of the United States, its territories, and possessions, and adjacent marine waters; world-wide import/export of animals	All/continuous
All ESA-listed Cetacea, all ESA-listed Pinnipedia under NMFS jurisdiction	All	M/F	As warranted to respond to emergencies*	As warranted to respond to emergencies*	Euthanasia, necropsy, carcass disposal	Carcasses may be transported to disposal sites or laboratories	Beaches, coastal waters and EEZ of the United States, its territories, and possessions, and adjacent marine waters	All/continuous
All ESA-listed Cetacea, all ESA-listed Pinnipedia under NMFS jurisdiction	All	M/F	As warranted to respond to emergencies*	As warranted to respond to emergencies*	Accidental mortality, necropsy, carcass disposal	Carcasses may be transported to disposal sites or laboratories	Beaches, coastal waters and EEZ of the United States, its territories, and possessions, and adjacent marine waters	All/continuous
All Cetacea, all Pinnipedia (including walrus), sea otter, manatee, and polar bear ³	All	M/F	As warranted to respond to emergencies*	As warranted to respond to emergencies*	Incidental harassment	N/A	Beaches, coastal waters and EEZ of the United States, its territories, and possessions, and adjacent marine waters	All/continuous

Table 2. Activities representatives of the National Marine Fisheries Service's Marine Mammal Health and Stranding Response Program would be authorized to conduct on endangered or threatened species under the proposed permit

Species	Life Stage	Gender	Expected Number of Individuals "Taken" ¹	Number of Times an Individual Might be "Taken"	Proposed Action	Transport	Location	Dates/Time Period
All Cetacea, all Pinnipedia (including walrus), sea otter, manatee, dugong, and polar bear ³	All	M/F	As warranted to respond to emergencies*	As warranted to respond to emergencies*	Receipt, import/export of samples	Analytical and diagnostic samples may be transported, imported or exported as needed to laboratories	Beaches, coastal waters and EEZ of the United States, its territories, and possessions, and adjacent marine waters; world-wide import/export	All/continuous
Project 2: Prospective Health Assessment Research Activities								
ESA-listed Hawaiian monk seals, and Guadalupe fur seals that are held in captivity and are not releasable back into the wild; and those undergoing rehabilitation	All	M/F	As warranted to satisfy the requirements of study design	As warranted to satisfy the requirements of study design	Capture (net or hand), restraint, handling, tagging, marking (tagging and marking excludes hot branding and would only occur if an animal is not already marked or is not otherwise identifiable), sample collection (including biopsy), release; and acoustic sampling, recording, and playbacks	None	Captive holding facilities, including rehabilitation centers	All
Large Whales (gray, right, humpback, fin, blue, sei, Bryde's, minke, bowhead, and sperm whales)	All	M/F	Up to 4,900 annually (total)	5	Close approach, aerial and vessel surveys (collection of feces, photo-identification for visual health assessment and ID)	None	Coastal waters and EEZ of the United States, its territories, and possessions, and adjacent marine waters	All
Large Whales (see above)	All except calves \leq 6 months in age and cows with calves (for tagging and sampling)	M/F	Up to 100 annually (total)	5	Close approach, aerial and vessel surveys; Tagging and sample collection (including biopsy and respiratory gases), acoustic sampling (including recording and playback experiments), collection of feces, photo-identification (for visual health assessment and ID)	None	Coastal waters and EEZ of the United States, its territories, and possessions, and adjacent marine waters	All
Large Whales (see above)	All except calves \leq 6	M/F	Up to 400 annually (total)	5	Collection of samples from dead animals in conjunction with the	None	Coastal waters and EEZ of the United	All

Table 2. Activities representatives of the National Marine Fisheries Service's Marine Mammal Health and Stranding Response Program would be authorized to conduct on endangered or threatened species under the proposed permit

Species	Life Stage	Gender	Expected Number of Individuals "Taken" ¹	Number of Times an Individual Might be "Taken"	Proposed Action	Transport	Location	Dates/Time Period
	months in age and cows with calves (for "takes" of live animals)				activities of other investigators who are operating under other permits or legal authority (subsistence harvest, by-catch); collection of respiratory gasses and blood samples from live animals in conjunction with the activities of other investigators who are operating under other permits or legal authority or during Emergency response activities under this permit		States, its territories, and possessions, and adjacent marine waters	
All Cetacea, all Pinnipedia (including walrus), sea otter, manatee, dugong, and polar bear ³	All	M/F	As warranted to satisfy the requirements of study design	As warranted to satisfy the requirements of study design	Receipt, import/export of samples	Analytical and diagnostic samples may be transported, imported or exported as needed to laboratories	Beaches, coastal waters of the US, waters within the US EEZ, and international waters; world-wide import/export	All/continuous

1 The ESA defines "take" as "harass, harm, pursue, hunt, shoot, would, kill, trap, capture, or collect, or attempt to engage in any such conduct" (16 U.S.C. 1532)

2. "Emergencies" generally refers to health emergencies involving marine mammals and include, but are not limited to stranding events, entanglements, trauma-related incidents (for example, ship strikes and gun-shots), oil spills, disease outbreaks, and exposure to biotoxins. Due to their nature, the number of individuals that might be "taken" during responses to these health emergencies cannot be determined in advance

3. dugongs, manatees, polar bears, sea otters, and walruses are under the jurisdiction of the U.S. Fish and Wildlife Service and are not addressed in this biological opinion