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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

RIN 0648-XF366

Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to Seabird and Pinniped Research Activities in Central California, 2017-2018

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Proposed Incidental Harassment Authorization; request for comments

SUMMARY: NMFS has received an application from Point Blue Conservation Science (Point Blue) for an Incidental Harassment Authorization (IHA) to take marine mammals, by harassment, incidental to seabird and pinniped research activities in central California. Pursuant to the Marine Mammal Protection Act (MMPA), NMFS is requesting comments on its proposal to issue an IHA to Point Blue to incidentally take marine mammals during the specified activities.

DATES: Comments and information must be received no later than [*insert date 30 days after date of publication in the FEDERAL REGISTER*].

ADDRESSES: Comments on the applications should be addressed to Jolie Harrison, Chief, Permits and Conservation Division, Office of Protected Resources, National Marine Fisheries Service. Physical comments should be sent to 1315 East-West Highway, Silver Spring, MD 20910 and electronic comments should be sent to ITP.pauline@noaa.gov.

Instructions: NMFS is not responsible for comments sent by any other method, to any other address or individual, or received after the end of the comment period. Comments received

electronically, including all attachments, must not exceed a 25-megabyte file size. Attachments to electronic comments will be accepted in Microsoft Word or Excel or Adobe PDF file formats only. All comments received are a part of the public record and will generally be posted to the Internet at www.nmfs.noaa.gov/pr/permits/incidental/research.htm without change. All personal identifying information (*e.g.*, name, address) voluntarily submitted by the commenter may be publicly accessible. Do not submit confidential business information or otherwise sensitive or protected information.

FOR FURTHER INFORMATION CONTACT: Robert Pauline, Office of Protected Resources, NMFS, (301) 427-8401. Electronic copies of the applications and supporting documents, as well as a list of the references cited in this document, may be obtained by visiting the Internet at: www.nmfs.noaa.gov/pr/permits/incidental/research.htm. In case of problems accessing these documents, please call the contact listed above.

SUPPLEMENTARY INFORMATION:

Background

Sections 101(a)(5)(A) and (D) of the MMPA (16 U.S.C. 1361 *et seq.*) direct the Secretary of Commerce to allow, upon request, the incidental, but not intentional, taking of small numbers of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region if certain findings are made and either regulations are issued or, if the taking is limited to harassment, a notice of a proposed authorization is provided to the public for review.

An authorization for incidental takings will be granted if NMFS finds that the taking will have a negligible impact on the species or stock(s), will not have an unmitigable adverse impact on the availability of the species or stock(s) for subsistence uses (where relevant), and if the

permissible methods of taking and requirements pertaining to the mitigation, monitoring and reporting of such takings are set forth.

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

The MMPA states that the term “take” means to harass, hunt, capture, kill or attempt to harass, hunt, capture, or kill any marine mammal.

Except with respect to certain activities not pertinent here, the MMPA defines “harassment” as: any act of pursuit, torment, or annoyance which (i) has the potential to injure a marine mammal or marine mammal stock in the wild (Level A harassment); or (ii) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering (Level B harassment).

Summary of Request

NMFS received a request from Point Blue for an IHA to take marine mammals incidental to seabird and marine mammal monitoring at three locations in central California. Point Blue’s request was for harassment only and NMFS concurs that mortality is not expected to result from this activity. Therefore, an IHA is appropriate.

On March 7, 2017, NMFS received an application from Point Blue requesting the taking by harassment of marine mammals incidental to conducting seabird and marine mammal research activities on Southeast Farallon Island (SEFI), Año Nuevo Island (ANI), and Point Reyes National Seashore (PRNS). Point Blue, along with partners Oikonos Ecosystem Knowledge and PRNS, plan to conduct the proposed activities for one year. These partners are

conducting this research under cooperative agreements with the U.S. Fish and Wildlife Service in consultation with the Gulf of the Farallones National Marine Sanctuary. We considered the renewal for request for 2017-2018 activities as adequate and complete on April 7, 2017.

These proposed activities would occur in the vicinity of pinniped haul-out sites and could likely result in the incidental take of marine mammals. We anticipate take, by Level B harassment only, of individuals of California sea lions (*Zalophus californianus*), Pacific harbor seals (*Phoca vitulina*), northern elephant seals (*Mirounga angustirostris*), and Steller sea lions (*Eumetopias jubatus*) to result from the specified activity.

This is the organization's eighth request for an IHA. To date, we have issued authorizations to Point Blue (formerly known as PRBO Conservation Science) for the conduct of similar activities from 2007 to 2016 (72 FR 71121; December 14, 2007, 73 FR 77011; December 18, 2008, 75 FR 8677; February 19, 2010, 77 FR 73989; December 7, 2012, 78 FR 66686; November 6, 2013, 80 FR 80321; December 24, 2015, 81 FR 34978; June 1, 2016).

Description of Specified Activities

Overview

Point Blue proposes to monitor and census seabird colonies; observe seabird nesting habitat; restore nesting burrows; observe breeding elephant and harbor seals; and resupply a field station annually in central California (*i.e.*, SEFI, ANI, and PRNS). The purpose of the seabird research is to continue a 30-year monitoring program of the region's seabird populations. Point Blue's long-term pinniped research program monitors pinniped colonies to understand elephant and harbor seal population dynamics and to contribute to the conservation of both species. Level B take may occur due to incidental disturbance of pinnipeds by researchers during monitoring.

Dates and Duration

The proposed authorization would be effective from June 16, 2017 through May 15, 2018. Surveys are conducted year-round at the specified locations. At SEFI, seabird monitoring sites are visited ~ 1-3 times per day for a maximum of 500 visits per year. Most seabird monitoring visits are brief (~15 minutes), though seabird observers are present from 2-5 hours daily at North Landing from early April – early August each year to conduct observational studies on breeding common murre. Boat landings to re-supply the field station, lasting 1-3 hours, are conducted once every 2 weeks at one of the these locations. At ANI, research is conducted once/week April-August, with occasional intermittent visits made during the rest of the year. The maximum number of visits per year would be 20. Nesting habitat restoration and monitoring activities require sporadic visits from September-November, between the seabird breeding season and the elephant seal pupping season. Landings and visits to nest boxes are brief (~15 minutes). Research may occur during any month, with an emphasis during the seabird nesting season with occasional intermittent visits the rest of the year. The maximum number of visits per year is 20. Habitat restoration and monitoring work requires sporadic visits from September-November, between the seabird breeding season and the elephant seal pupping season.

Specified Geographic Region

Point Blue will conduct their research activities within the vicinity of pinniped haul-out sites in the following locations:

- *South Farallon Islands*: The South Farallon Islands consist of SEFI located at 37°41'54.32" N; 123° 0'8.33" W and West End Island. The South Farallon Islands have a land area of approximately 120 acres (0.49 square kilometers (km²)) and are part of the Farallon National Wildlife Refuge. The islands are located near the edge of the

continental shelf 28 miles (mi) (45.1 km) west of San Francisco, CA, and lie within the waters of the Gulf of the Farallones National Marine Sanctuary;

- *Año Nuevo Island*: ANI is located at 37° 6'29.25" N; 122°20'12.20" W is one-quarter mile (402 meters m) offshore of Año Nuevo Point in San Mateo County, CA. The island lies within the Monterey Bay National Marine Sanctuary and the Año Nuevo State Marine Conservation Area; and
- *Point Reyes National Seashore*: PRNS is approximately 40 miles (64.3 km) north of San Francisco Bay and also lies within the Gulf of the Farallones National Marine Sanctuary.

Detailed Description of Specified Activity

Southeast Farallon Islands

Point Blue has conducted year round wildlife research and monitoring activities at SEFI, part of the Farallon National Wildlife Refuge, since 1968. This work is conducted through a collaborative agreement with the United States Fish and Wildlife Service (USFWS). Research focuses on marine mammals and seabirds and includes procedures involved in maintaining the SEFI field station. These activities may involve the incidental take of marine mammals.

Seabird research activities involve observational and marking (*i.e.*, netting and banding for capture-mark-recapture) studies of breeding seabirds. Occasionally researchers may travel to coastal areas of the island to conduct observational seabird research where non-breeding marine mammals are present, which includes viewing breeding seabirds from an observation blind or censusing shorebirds, and usually involves one or two observers. Access to the refuge involves landing in small boats, 14-18 ft open motorboats, which are hoisted onto the island using a derrick system.

Most intertidal areas of the island, where marine mammals are present, are rarely visited in seabird research. Most potential for incidental take will occur at the island's two landings, North Landing and East Landing. At both landings, research stations are located more than 50 ft above any pinnipeds that may be present and are visited 1-3 times per day. These pinnipeds are primarily California sea lions or northern elephant seals, to a lesser extent harbor seals, and very rarely Steller sea lions. Boat landings to re-supply the field station, lasting 1-3 hours, are conducted once every 2 weeks at either the North or East Landing. Activities involve launching of the boat with one operator, with 2-4 other researchers assisting with the operations from land. At East Landing, the primary landing site, all personnel assisting with the landing stay on the loading platform 30 ft above the water. At North Landing, loading operations occur at the water level in the intertidal zone.

Año Nuevo Island

Point Blue has also conducted seabird research and monitoring activities on ANI, part of the Año Nuevo State Reserve, since 1992. Collaborations with Oikonos Ecosystem Knowledge began in 2001 to research seabird burrow nesting habitat quality and restoration. All work is conducted through a collaborative agreement with California State Parks. The island is accessed by 12 ft Zodiac boat. Non-breeding pinnipeds may occasionally be present on the small beach in the center of the island where the boat is landed. California sea lions may also occasionally be present near a small group of subterranean seabird nest boxes on the island terrace. There are usually 2-3 researchers involved in island visits.

Point Reyes National Seashore

The National Park Service (NPS) conducts research, resource management and routine maintenance services at PRNS. This involves both marine mammal research and seabird research

and includes maintaining the facilities around the seashore. Habitat restoration of the seashore occurs and includes restoration and removal of non-native invasive plants and coastal dune habitat. Non-native plant removal is timed to avoid the breeding seasons of pinnipeds; however, on occasion non-breeding animals may be present at various beaches throughout the year. Additionally, elephant seals will haul out on human structures and block access to facilities. They are known to haul out on a boat ramp at the Life Boat Station and in various car parking lots around the seashore.

Research along the seashore includes monitoring seabird breeding and roosting colonies. Seabird monitoring usually involves one or two observers. Surveys are conducted by small boats, 14-22 ft open motorboats, that survey along the shoreline.

Most areas where marine mammals are present are never visited, excepting the landing beaches along Point Reyes headland. In all locations researchers are located more than 50 ft away from any pinnipeds that may be hauled out. Elephant seals may haul out on boat ramps and parking lots year round.

Description of Marine Mammals in the Area of Specified Activities

We have reviewed Point Blue's species information—which summarizes available information regarding status and trends, distribution and habitat preferences, behavior and life history of the potentially affected species—for accuracy and completeness and refer the reader to Sections 3 and 4 of the application, as well as to NMFS's Stock Assessment Reports (SAR; www.nmfs.noaa.gov/pr/sars/). Additional general information about these species (*e.g.*, physical and behavioral descriptions) may be found on NMFS's website (www.nmfs.noaa.gov/pr/species/mammals/). Table 1 lists all species with expected potential for occurrence at SEFI, ANI, and PRNS and summarizes information related to the population or

stock, including potential biological removal (PBR), where known. For taxonomy, we follow Committee on Taxonomy (2016). PBR, defined by the MMPA as the maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population, is considered in concert with known sources of ongoing anthropogenic mortality to assess the population-level effects of the anticipated mortality from a specific project (as described in NMFS's SARs). While no mortality is anticipated or authorized here, PBR and annual serious injury and mortality are included here as gross indicators of the status of the species and other threats. For status of species, we provide information regarding U.S. regulatory status under the MMPA and the Endangered Species Act (ESA). California (southern) sea otters (*Enhydra lutris nereis*), listed as threatened under the ESA and categorized as depleted under the MMPA, usually range in coastal waters within two km of shore. Point Blue has not encountered California sea otters on SEFI, ANI, or PRNS during the course of seabird or pinniped research activities over the past five years. This species is managed by the USFWS and is not considered further in this notice. Marine mammal abundance estimates presented in this document represent the total number of individuals that make up a given stock or the total number estimated within a particular study area. NMFS's stock abundance estimates for most species represent the total estimate of individuals within the geographic area, if known, that comprises that stock.

All managed stocks in this region are assessed in NMFS's 2015 U.S. Pacific Stock Assessment Report (Carretta *et al.*, 2016) or the 2015 Alaska Stock Assessment Report (Muto *et al.*, 2016). The most recent information regarding Steller sea lions may be found in 2016 Draft Alaska Stock Assessment Report (Muto *et al.*, 2016b). Four species have the potential to be incidentally taken during the proposed survey activities and are listed in Table 1. Values

presented in Table 1 are from the 2015 SARs and draft 2016 SARs (available online at: www.nmfs.noaa.gov/pr/sars/draft.htm).

Table 1. Marine mammals potentially present in the vicinity of study areas.

Species	Scientific Name	Stock	ESA/MMPA status; Strategic (Y/N) ¹	Stock abundance (CV, N _{min} , most recent abundance survey) ²	PBR ³
California sea lion	<i>Zalophus californianus</i>	U.S.	-; N	296,750 (n/a; 153,337; 2011)	9,200
Steller sea lion	<i>Eumetopias jubatus</i>	Eastern U.S.	D; Y	71,562 (n/a; 41,638; 2015)	2,498
Harbor seal	<i>Phoca vitulina richardii</i>	California	-; N	30,968 (0.157; 27,348; 2012)	1,641
Northern elephant seal	<i>Mirounga angustirostris</i>	California breeding stock	-; N	179,000 (n/a; 81,368; 2010)	4,882

¹ESA status: Endangered (E), Threatened (T) / MMPA status: Depleted (D). A dash (-) indicates that the species is not listed under the ESA or designated as depleted under the MMPA.

²CV is coefficient of variation; N_{min} is the minimum estimate of stock abundance. In some cases, CV is not applicable. For certain stocks of pinnipeds, abundance estimates are based upon observations of animals (often pups) ashore multiplied by some correction factor derived from knowledge of the specie's (or similar species') life history to arrive at a best abundance estimate; therefore, there is no associated CV. In these cases, the minimum abundance may represent actual counts of all animals ashore.

³Potential biological removal, defined by the MMPA as the maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population size (OSP).

Northern Elephant Seal

Northern elephant seals are not listed as threatened or endangered under the ESA, nor are they categorized as depleted or strategic under the MMPA. The estimated population of the California Breeding Stock is approximately 179,000 animals and the current population trend is increasing at 3.8 percent annually (Carretta *et al.*, 2016).

Northern elephant seals range in the eastern and central North Pacific Ocean, from as far north as Alaska to as far south as Mexico. Northern elephant seals spend much of the year, generally about nine months, in the ocean. They are usually underwater, diving to depths of

about 1,000 to 2,500 ft (330-800 m) for 20- to 30-minute intervals with only short breaks at the surface. They are rarely seen out at sea for this reason. While on land, they prefer sandy beaches.

The northern elephant breeding population is distributed from central Baja California, Mexico to the Point Reyes Peninsula in northern California. Along this coastline there are 13 major breeding colonies. Northern elephant seals breed and give birth primarily on offshore islands (Stewart *et al.*, 1994), from December to March (Stewart and Huber, 1993). Males feed near the eastern Aleutian Islands and in the Gulf of Alaska, and females feed farther south, south of 45° N (Stewart and Huber, 1993; Le Boeuf *et al.*, 1993). Adults return to land between March and August to molt, with males returning later than females. Adults return to their feeding areas again between their spring/summer molting and their winter breeding seasons.

At SEFI, the population consists of approximately 500 animals (FNMS 2013). Northern elephant seals began recolonizing the South Farallon Islands in the early 1970s (Stewart *et al.*, 1994) at which time the colony grew rapidly. In 1983 a record 475 pups were born on the South Farallones (Stewart *et al.*, 1994). Since then, the size of the South Farallones colony has declined, stabilizing in the early 2000s and then declining further over the past six years (USFWS 2013). In 2012, a total of 90 cows were counted on the South Farallones, and 60 pups were weaned (USFWS 2013). Point Blue's average monthly counts from 2000 to 2009 ranged from 20 individuals in July to nearly 500 individuals in November (USFWS 2013).

Northern elephant seals are present on the islands and in the waters surrounding the South Farallones year-round for either breeding or molting; however, they are more abundant during breeding and peak molting seasons (Le Boeuf and Laws, 1994; Sydeman and Allen, 1999). They live and feed in deep, offshore waters the remainder of the year.

In mid-December, adult males begin arriving on the South Farallones, closely followed by pregnant females on the verge of giving birth. Females give birth to a single pup, generally in late December or January (Le Boeuf and Laws, 1994) and nurse their pups for approximately four weeks (Reiter *et al.*, 1991). Upon pup weaning, females mate with an adult male and then depart the islands. The last adult breeders depart the islands in mid-March. The spring peak of elephant seals on the rookery occurs in April, when females and immature seals (approximately one to four years old) arrive at the colony to molt (a one month process) (USFWS 2013). The year's new pups remain on the island throughout both of these peaks, generally leaving by the end of April (USFWS 2013).

The lowest numbers of elephant seals present on the rookery occurs during June, July, and August, when sub-adult and adult males molt. Another peak of young seals return to the rookery for a haul-out period in October, and at that time some individuals undergo partial molt (Le Boeuf and Laws, 1994). At ANI the population ranges from 900 to 1,000 adults.

California Sea Lion

The estimated population of the U.S. stock of California sea lion is approximately 296,750 animals and the current maximum population growth rate is 12 percent (Carretta *et al.*, 2016). California sea lions are not listed as threatened or endangered under the ESA, nor are they categorized as depleted or strategic under the MMPA. California sea lion breeding areas are on islands located in southern California, in western Baja California, Mexico, and the Gulf of California. Rookery sites in southern California are limited to the San Miguel Islands and the southerly Channel Islands of San Nicolas, Santa Barbara, and San Clemente (Carretta *et al.*, 2016). Males establish breeding territories during May through July on both land and in the water. Females come ashore in mid-May and June where they give birth to a single pup

approximately four to five days after arrival and will nurse pups for about a week before going on their first feeding trip. Females will alternate feeding trips with nursing bouts until the pup is weaned between four and 10 months of age (NMML 2010).

Adult and juvenile males will migrate as far north as British Columbia, Canada while females and pups remain in southern California waters in the non-breeding season. In warm water (El Niño) years, some females are found as far north as Washington and Oregon, presumably following prey.

On the Farallon Islands, California sea lions haul out in many intertidal areas year round, fluctuating from several hundred to several thousand animals. California sea lions at PRNS haul out at only a few locations, but will occur on human structures such as boat ramps. The annual population averages around 300 to 500 during the fall through spring months, although on occasion, several thousand sea lions can arrive depending upon local prey resources (S. Allen, unpublished data). On ANI, California sea lions may haul out at one of eight beach areas on the perimeter of the island (see Point Blue's Application). The island's average population ranges from 4,000 to 9,500 animals (M. Lowry, unpublished data).

Pacific Harbor Seal

Pacific harbor seals are not listed as threatened or endangered under the ESA, nor are they categorized as depleted or strategic under the MMPA. The estimated population of the California stock of harbor seals is 30,968 animals (Carretta *et al.*, 2016).

The animals inhabit near-shore coastal and estuarine areas from Baja California, Mexico, to the Pribilof Islands in Alaska. Pacific harbor seals are divided into two subspecies: *P. v. stejnegeri* in the western North Pacific, near Japan, and *P. v. richardsi* in the northeast Pacific Ocean. The California stock ranges from north of Baja, California to the Oregon-California

border. Other stocks recognized along the U.S. west coast include: 1) Southern Puget Sound; 2) Washington Northern Inland Waters; 3) Hood Canal; and 4) Oregon/Washington Coast.

In California, 400-600 harbor seal haul-out sites are widely distributed along the mainland and offshore islands, and include rocky shores, beaches and intertidal sandbars (Lowry *et al.*, 2008). On the Farallon Islands, approximately 40 to 120 Pacific harbor seals haul out in the intertidal areas (Point Blue unpublished data). Harbor seals at PRNS haul out at nine locations with an annual population of up to 4,000 animals (M. Lowry, unpublished data). On ANI, harbor seals may haul out at one of eight beach areas on the perimeter of the island and the island's average population ranges from 100 to 150 animals (M. Lowry, unpublished data).

Steller Sea Lion

Steller sea lions consist of two distinct population segments: The western and eastern distinct population segments (DPS) divided at 144° West longitude (Cape Suckling, Alaska). The western segment of Steller sea lions inhabit central and western Gulf of Alaska, Aleutian Islands, as well as coastal waters and breed in Asia (*e.g.*, Japan and Russia). The eastern segment includes sea lions living in southeast Alaska, British Columbia, California, and Oregon. The eastern DPS includes animals born east of Cape Suckling, AK (144° W) and the latest abundance estimate for the stock is 71,562 animals (Muto *et al.*, 2016). The eastern DPS of Steller sea lion is not listed as threatened or endangered under the ESA, nor is it listed as strategic under the MMPA.

Despite the wide-ranging movements of juveniles and adult males in particular, exchange between rookeries by breeding adult females and males (other than between adjoining rookeries) appears low, although males have a higher tendency to disperse than females (NMFS, 1995; Trujillo *et al.*, 2004; Hoffman *et al.*, 2006). A northward shift in the overall breeding distribution

has occurred, with a contraction of the range in southern California and new rookeries established in southeastern Alaska (Pitcher *et al.*, 2007).

An estimated 50-150 Steller sea lions are located along the Farallon Islands while 400-600 may be found on ANI (Point Blue, unpublished data; Lowry, unpublished data). None are present at PRNS (NPS, unpublished data). Overall, counts of non-pups at trend sites in California and Oregon have been relatively stable or increasing slowly since the 1980s (Muto *et al.*, 2016).

Point Blue estimates that between 50 and 150 Steller sea lions live on the Farallon Islands. On SEFI, the abundance of females declined an average of 3.6 percent per year from 1974 to 1997 (Sydeman and Allen, 1999).

NMFS' Southwest Fisheries Science Center estimates between 400 and 600 live on ANI (Point Blue unpublished data, 2008; Southwest Fisheries Science Center unpublished data, 2008). At ANI, a steady decline in ground counts started around 1970, and there was an 85 percent reduction in the breeding population by 1987 (LeBoeuf *et al.*, 1991). Pup counts at ANI declined 5 percent annually through the 1990s and stabilized between 2001 and 2005 (M. Lowry, SWFSC unpublished data). Pups have not been born at PRNS since the 1970s and Steller sea lions are seen in very low numbers there currently (S. Allen, unpublished data).

SEFI is one of two breeding colonies at the southern end of the Steller sea lion's range. On the Farallon and Año Nuevo Islands, Steller sea lion breeding colonies are located in closed areas where researchers never visited, eliminating any risk of disturbing breeding animals.

Potential Effects of Specified Activities on Marine Mammals and their Habitat

This section includes a summary and discussion of the ways that components of the specified activity may impact marine mammals and their habitat. The "Estimated Take by Incidental Harassment" section later in this document will include a quantitative analysis of the

number of individuals that are expected to be taken by this activity. The “Negligible Impact Analysis and Determination” section will consider the content of this section, the “Estimated Take by Incidental Harassment” section, and the “Proposed Mitigation” section, to draw conclusions regarding the likely impacts of these activities on the reproductive success or survivorship of individuals and how those impacts on individuals are likely to impact marine mammal species or stocks.

Visual and acoustic stimuli generated by the appearance of researchers and motorboat operations may have the potential to cause Level B harassment of pinnipeds hauled out on SEFI, ANI, or PRNS. This section includes a summary and discussion of the ways that the types of stressors associated with the specified activity (*e.g.*, personnel presence and motorboats) have been observed to impact marine mammals. This discussion may also include reactions that we consider to rise to the level of a take and those that we do not consider to rise to the level of a take. This section is intended as a background of potential effects and does not consider either the specific manner in which this activity will be carried out or the mitigation that will be implemented, and how either of those will shape the anticipated impacts from this specific activity.

The appearance of researchers may have the potential to cause Level B harassment of any pinnipeds hauled out at survey sites. Disturbance may result in reactions ranging from an animal simply becoming alert to the presence of researchers (*e.g.*, turning the head, assuming a more upright posture) to flushing from the haul-out site into the water. NMFS does not consider the lesser reactions to constitute behavioral harassment, or Level B harassment take, but rather assumes that pinnipeds that flee some distance or change the speed or direction of their movement in response to the presence of researchers are behaviorally harassed, and thus subject

to Level B taking. Animals that respond to the presence of researchers by becoming alert, but do not move or change the nature of locomotion as described, are not considered to have been subject to behavioral harassment.

Reactions to human presence, if any, depend on species, state of maturity, experience, current activity, reproductive state, time of day, and many other factors (Richardson *et al.*, 1995; Southall *et al.*, 2007; Weilgart 2007). These behavioral reactions from marine mammals are often shown as: Changing durations of surfacing and dives, number of blows per surfacing, or moving direction and/or speed; reduced/increased vocal activities; changing/cessation of certain behavioral activities (such as socializing or feeding); visible startle response or aggressive behavior; avoidance of areas; and/or flight responses (*e.g.*, pinnipeds flushing into the water from haul-outs or rookeries). If a marine mammal does react briefly to human presence by changing its behavior or moving a small distance, the impacts of the change are unlikely to be significant to the individual, let alone the stock or population. However, if visual stimuli from human presence displaces marine mammals from an important feeding or breeding area for a prolonged period, impacts on individuals and populations could be significant (*e.g.*, Lusseau and Bejder 2007; Weilgart, 2007). Numerous studies have shown that human activity can flush harbor seals off haul-out sites (Allen *et al.*, 1985; Calambokidis *et al.*, 1991; Suryan and Harvey, 1999). The Hawaiian monk seal (*Neomonachus schauinslandi*) has been shown to avoid beaches that have been disturbed often by humans (Kenyon 1972). In one case, human disturbance appeared to cause Steller sea lions to desert a breeding area at Northeast Point on St. Paul Island, Alaska (Kenyon 1962).

In cases where vessels actively approached marine mammals (*e.g.*, whale watching or dolphin watching boats), scientists have documented that animals exhibit altered behavior such

as increased swimming speed, erratic movement, and active avoidance behavior (Acevedo, 1991; Trites and Bain, 2000; Williams *et al.*, 2002; Constantine *et al.*, 2003), reduced blow interval, disruption of normal social behaviors (Lusseau 2003; 2006), and the shift of behavioral activities which may increase energetic costs (Constantine *et al.*, 2003).

In 1997, Henry and Hammil (2001) conducted a study to measure the impacts of small boats (*i.e.*, kayaks, canoes, motorboats and sailboats) on harbor seal haul-out behavior in Metis Bay, Quebec, Canada. During that study, the authors noted that the most frequent disturbances (n=73) were caused by lower speed, lingering kayaks, and canoes (33.3 percent) as opposed to motorboats (27.8 percent) conducting high speed passes. The seal's flight reactions could be linked to a surprise factor by kayaks and canoes, which approach slowly, quietly, and low on the water making them look like predators. However, the authors note that once the animals were disturbed, there did not appear to be any significant lingering effect on the recovery of numbers to their pre-disturbance levels. In conclusion, the study showed that boat traffic at current levels had only a temporary effect on the haul-out behavior of harbor seals in the Metis Bay area.

In 2004, Acevedo-Gutierrez and Johnson (2007) evaluated the efficacy of buffer zones for watercraft around harbor seal haul-out sites on Yellow Island, Washington. The authors estimated the minimum distance between the vessels and the haul-out sites; categorized the vessel types; and evaluated seal responses to the disturbances. During the course of the seven-weekend study, the authors recorded 14 human-related disturbances that were associated with stopped powerboats and kayaks. During these events, hauled out seals became noticeably active and moved into the water. The flushing occurred when stopped kayaks and powerboats were at distances as far as 453 and 1,217 ft (138 and 371 m) respectively. The authors note that the seals were unaffected by passing powerboats, even those approaching as close as 128 ft (39 m),

possibly indicating that the animals had become tolerant of the brief presence of the vessels and ignored them. The authors reported that on average, the seals quickly recovered from the disturbances and returned to the haul-out site in less than or equal to 60 minutes. Seal numbers did not return to pre-disturbance levels within 180 minutes of the disturbance less than one quarter of the time observed. The study concluded that the return of seal numbers to pre-disturbance levels and the relatively regular seasonal cycle in abundance throughout the area counter the idea that disturbances from powerboats may result in site abandonment (Johnson and Acevedo-Gutierrez, 2007). As a general statement from the available information, pinnipeds exposed to intense (approximately 110 to 120 decibels re: 20 μ Pa) non-pulsed sounds often leave haul-out areas and seek refuge temporarily (minutes to a few hours) in the water (Southall *et al.*, 2007).

The potential for striking marine mammals is a concern with vessel traffic. Typically, the reasons for vessel strikes are fast transit speeds, lack of maneuverability, or not seeing the animal because the boat is so large. Point Blue's researchers will access areas at slow transit speeds in small boats that are easily maneuverable, minimizing any chance of an accidental strike.

There are other ways in which disturbance, as described previously, could result in more than Level B harassment of marine mammals. They are most likely to be consequences of stampeding, a potentially dangerous occurrence in which large numbers of animals succumb to mass panic and rush away from a stimulus. These situations are: (1) Falling when entering the water at high-relief locations; (2) extended separation of mothers and pups; and (3) crushing of pups by larger animals during a stampede. However, NMFS does not expect any of these scenarios to occur at SEFI, ANI, or PRNS. There is the risk of injury if animals stampede towards shorelines with precipitous relief (*e.g.*, cliffs). Researchers will take precautions, such

as moving slowly and staying close to the ground, to ensure that flushes do not result in a stampede of pinnipeds heading to the sea. Point Blue reports that stampedes are extremely rare at their survey locations. Furthermore, no research activities would occur at or near pinniped rookeries. Breeding animals are concentrated in areas where researchers would not visit so NMFS does not expect mother and pup separation or crushing of pups during flushing. Furthermore, if pups should be present at Point Blue, researchers will avoid visiting that particular site.

Given the nature of the proposed activities (*i.e.* animal observations from a distance and limited motorboat operations) in conjunction with proposed mitigation measures, NMFS is confident that any anticipated effects would be in the form of behavioral disturbance only. NMFS considers the risk of injury, serious injury, or mortality to marine mammals to be very low.

There are no habitat modifications associated with the proposed activity other than the presence of existing blinds by researchers to monitor animals. These blinds disturb only a few square feet of habitat. The presence of the blinds will likely result in a net decrease in disturbance since the researchers will only be visible briefly as they enter and exit the blind. Thus, NMFS does not expect that the proposed activity would have any effects on marine mammal habitat and NMFS expects that there will be no long- or short-term physical impacts to pinniped habitat on SEFI, ANI, or PRNS.

Estimated Take

This section includes an estimate of the number of incidental “takes” proposed for authorization pursuant to this IHA, which will inform both NMFS’ consideration of whether the number of takes is “small” and the negligible impact determination.

Harassment is the only form of take expected to result from these activities. Except with respect to certain activities not pertinent here, the MMPA defines "harassment" as: any act of pursuit, torment, or annoyance which (i) has the potential to injure a marine mammal or marine mammal stock in the wild (Level A harassment); or (ii) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering (Level B harassment).

Authorized takes would be by Level B harassment only, in the form of disruption of behavioral patterns for individual marine mammals resulting from exposure to researchers and motorboat operations. Based on the nature of the activity, Level A harassment is neither anticipated nor proposed to be authorized. Below we describe how the take is estimated.

NMFS bases these new take estimates on historical data from previous monitoring reports and anecdotal data for the same activities conducted in the same research areas. In brief, for four species (*i.e.*, California sea lions, harbor seals, northern elephant seals, and Steller sea lions), NMFS created a statistical model to derive an estimate of the average annual increase of reported take based on a best fit regression analysis (*i.e.*, linear or polynomial regression) of reported take from 2007 to 2016. Note that Point Blue has never exceeded authorized take levels under any previously issued IHA. Final data from the 2016-2017 season has not been submitted. The predicted annual increase in take for each species was added to the baseline reported take for the 2015-2016 seasons to project the estimated take for the proposed 2017-2018 IHA as is shown in Table 2.

Table 2. Past Reported Take Observations and Estimated Take for Proposed 2017-2018 Point Blue Conservation Science Activities.

Species	Reported Take Observations from Past Seasons ¹	Annual Projecte	Projected Take
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	IHA 1 (2007- 2008)	IHA 2 (2008- 2009)	IHA 3 (2011- 2012)	IHA 4 (2012- 2013)	IHA 5 (2014- 2015)	IHA 6 (2015- 2016)	d Increase	2017-2018 IHA
California Sea Lions	744	747	3,610	2,254	4,646	36,397 ²	11,223	40,138 ³ (47,620)
Northern Elephant Seals	44	44	67	30	97	169	34	203
Harbor Seals	39	75	109	141	259	292	107	399
Steller Sea Lions (E-DPS)	5	4	4	12	6	31	5	36

¹Data for 2009-2010 and 2010-2011 not available.

²Large increase in California sea lions likely due to El Niño event.

³NMFS has decreased projected California sea lion take based on preliminary 2016 observed take data.

The estimated take for California sea lions has been reduced from the figure authorized under the existing 2016-2017 IHA (55,583). NMFS noted that large numbers of California sea lions recorded in 2015-2016 were likely due to an El Niño event, which ended in May/June of 2016. The El Niño Southern Oscillation (ENSO) is a single climate phenomenon that periodically fluctuates between 3 phases: Neutral, La Niña or El Niño. La Niña and El Niño are opposite phases that require certain changes to take place in both the ocean and the atmosphere, before an event is declared. ENSO is currently in a neutral state, meaning that sea lion numbers may not approach the projected take for 2017-2018 shown in Table 2. Recent data suggests that there are increasing chances another El Niño could develop in the fall of 2017, although it is impossible to predict the length or severity of such an event (NOAA 2017). Therefore, sea lion numbers could occur at levels similar to what was observed in the 2015-2016 season under El Niño conditions.

Point Blue has provided preliminary data for recorded California sea lion takes at SEFI from calendar year 2016 (January-December), which shows 33,904 California sea lion takes at SEFI. Point Blue has not yet tabulated the data for ANI and PRNS. However, Point Blue estimates that approximately 1000 animals will be taken at ANI and few, if any, will be taken at PRNS based on preliminary analysis of 2016 data. Therefore, the result for calendar year 2016 is

approximately 34,904 sea lion takes (33,904 from SEFI and 1,000 from ANI and PRNS). Note that a portion of the 2016 calendar year featured El Niño conditions (January- May/June), which are predicted to return in the fall of 2017. Therefore, the 2016 calendar year data can serve as a baseline for proposed 2017-2018 IHA. NMFS will conservatively add 15 percent to the estimated 2016 yearly total to arrive at a proposed authorized take of 40,139 California sea lions for the 2017-2018 IHA.

Proposed Mitigation

In order to issue an IHA under Section 101(a)(5)(D) of the MMPA, NMFS must set forth the permissible methods of taking pursuant to such activity, and other means of effecting the least practicable impact on such species or stock and its habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance. NMFS regulations require applicants for incidental take authorizations to include information about the availability and feasibility (economic and technological) of equipment, methods, and manner of conducting such activity or other means of effecting the least practicable adverse impact upon the affected species or stocks and their habitat (50 CFR 216.104(a)(11)).

In evaluating how mitigation may or may not be appropriate to ensure the least practicable adverse impact on species or stocks and their habitat, as well as subsistence uses where applicable, we carefully balance two primary factors: 1) the manner in which, and the degree to which, the successful implementation of the measure(s) is expected to reduce impacts to marine mammals, marine mammal species or stocks, and their habitat, which considers the nature of the potential adverse impact being mitigated (likelihood, scope, range), as well as the likelihood that the measure will be effective if implemented; and the likelihood of effective implementation, and; 2) the practicability of the measures for applicant implementation, which

may consider such things as cost, impact on operations, and, in the case of a military readiness activity, personnel safety, practicality of implementation, and impact on the effectiveness of the military readiness activity.

Point Blue has based the mitigation measures, which they will employ during the proposed research, on the implementation of protocols used during previous Point Blue research activities under previous authorizations for these activities. Note that Point Blue and NMFS have refined mitigation requirements over the years in an effort to reduce behavioral disturbance impacts to marine mammals.

To reduce the potential for disturbance from acoustic and visual stimuli associated with the activities Point Blue has proposed to implement the following mitigation measures for marine mammals:

(1) Slow approach to beaches for boat landings to avoid stampede and provide animals opportunity to enter water.

(2) Select a pathway of approach to research sites that minimizes the number of marine mammals harassed.

(3) Avoid visits to sites used by pinnipeds for pupping.

(4) Monitor for offshore predators and do not approach hauled out pinnipeds if great white sharks (*Carcharodon carcharias*) or killer whales (*Orcinus orca*) are present. If Point Blue and/or its designees see pinniped predators in the area, they must not disturb the pinnipeds until the area is free of predators.

(5) Keep voices hushed and bodies low to the ground in the visual presence of pinnipeds.

(6) Conduct seabird observations at North Landing on SEFI in an observation blind, shielded from the view of hauled out pinnipeds.

(7) Crawl slowly to access seabird nest boxes on ANI if pinnipeds are within view.

(8) Coordinate research visits to intertidal areas of SEFI (to reduce potential take) and coordinate research goals for ANI to minimize the number of trips to the island.

(10) Coordinate monitoring schedules on ANI, so that areas near any pinnipeds would be accessed only once per visit.

(11) Operate motorboats slowly with caution during approaches to landing sites in order to avoid vessel strikes.

Based on our evaluation of the applicant's proposed measures, as well as other measures considered by NMFS, NMFS has preliminarily determined that the proposed mitigation measures provide the means effecting the least practicable impact on the affected species or stocks and their habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance.

Proposed Monitoring and Reporting

In order to issue an IHA for an activity, Section 101(a)(5)(D) of the MMPA states that NMFS must set forth, "requirements pertaining to the monitoring and reporting of such taking." The MMPA implementing regulations at 50 CFR 216.104 (a)(13) indicate that requests for authorizations must include the suggested means of accomplishing the necessary monitoring and reporting that will result in increased knowledge of the species and of the level of taking or impacts on populations of marine mammals that are expected to be present in the proposed action area. Effective reporting is critical both to compliance as well as to ensuring that the most value is obtained from the required monitoring.

Monitoring and reporting requirements prescribed by NMFS should contribute to improved understanding of one or more of the following:

- Occurrence of marine mammal species or stocks in the area in which take is anticipated (*e.g.*, presence, abundance, distribution, density);
- Nature, scope, or context of likely marine mammal exposure to potential stressors/impacts (individual or cumulative, acute or chronic), through better understanding of: (1) action or environment (*e.g.*, source characterization, propagation, ambient noise); (2) affected species (*e.g.*, life history, dive patterns); (3) co-occurrence of marine mammal species with the action; or (4) biological or behavioral context of exposure (*e.g.*, age, calving or feeding areas);
 - Individual marine mammal responses (behavioral or physiological) to acoustic stressors (acute, chronic, or cumulative), other stressors, or cumulative impacts from multiple stressors;
 - How anticipated responses to stressors impact either: (1) long-term fitness and survival of individual marine mammals; or (2) populations, species, or stocks;
 - Effects on marine mammal habitat (*e.g.*, marine mammal prey species, acoustic habitat, or other important physical components of marine mammal habitat); and
 - Mitigation and monitoring effectiveness.

Point Blue will contribute to the knowledge of pinnipeds in California by noting observations of: (1) Unusual behaviors, numbers, or distributions of pinnipeds, such that any potential follow-up research can be conducted by the appropriate personnel; (2) tag-bearing pinnipeds or carcasses, allowing transmittal of the information to appropriate agencies and personnel; and (3) rare or unusual species of marine mammals for agency follow-up.

Required monitoring protocols for Point Blue will include the following:

- (1) Record of date, time, and location (or closest point of ingress) of each visit to the research site;

- (2) Composition of the marine mammals sighted, such as species, gender and life history stage (*e.g.*, adult, sub-adult, pup);
- (3) Information on the numbers (by species) of marine mammals observed during the activities;
- (4) Estimated number of marine mammals (by species) that may have been harassed during the activities;
- (5) Behavioral responses or modifications of behaviors that may be attributed to the specific activities and a description of the specific activities occurring during that time (*e.g.*, pedestrian approach, vessel approach); and
- (6) Information on the weather, including the tidal state and horizontal visibility.

For consistency, any reactions by pinnipeds to researchers will be recorded according to a three-point scale shown in Table 3. Note that only observations of disturbance Levels 2 and 3 should be recorded as takes.

Table 3. Levels of Pinniped Behavioral Disturbance.

Level	Type of Response	Definition
1	Alert	Seal head orientation or brief movement in response to disturbance, which may include turning head towards the disturbance, craning head and neck while holding the body rigid in a u-shaped position, changing from a lying to a sitting position, or brief movement of less than twice the animal's body length.
2*	Movement	Movements in response to the source of disturbance, ranging from short withdrawals at least twice the animal's body length to longer retreats over the beach, or if already moving a change of direction of greater than 90 degrees.
3*	Flush	All retreats (flushes) to the water.

* Only observations of disturbance Levels 2 and 3 are recorded as takes.

This information will be incorporated into a monitoring report for NMFS. The monitoring report will cover the period from January 1, 2017 through December 31, 2017.

NMFS has requested that Point Blue submit annual monitoring report data on a calendar year schedule, regardless of the current IHA's initiation or expiration dates. This will ensure that data from all consecutive months will be collected and, therefore, can be analyzed to estimate authorized take for future IHA's regardless of the existing IHA's issuance date. Point Blue will submit a draft monitoring report to NMFS Office of Protected Resources by April 1, 2018. The draft report will include monitoring data collected between January 1, 2017 and December 31, 2017. A final report will be prepared and submitted within 30 days following resolution of any comments on the draft report from NMFS. If no comments are received from NMFS, the draft final report will be considered to be the final report. This report must contain the informational elements described above, at minimum.

Point Blue must also report observations of unusual pinniped behaviors, numbers, or distributions and tag-bearing carcasses to NMFS West Coast Region office.

If at any time the specified activity clearly causes the take of a marine mammal in a manner prohibited by this IHA, such as an injury (Level A harassment), serious injury, or mortality, Point Blue will immediately cease the specified activities and report the incident to the Office of Protected Resources, NMFS, and the West Coast Regional Stranding Coordinator, NMFS. The report must include the following information:

- (1) Time and date of the incident;
- (2) Description of the incident;
- (3) Environmental conditions (*e.g.*, wind speed and direction, Beaufort sea state, cloud cover, and visibility);
- (4) Description of all marine mammal observations in the 24 hours preceding the incident;

- (5) Species identification or description of the animal(s) involved;
- (6) Fate of the animal(s); and
- (7) Photographs or video footage of the animal(s).

Activities will not resume until NMFS is able to review the circumstances of the prohibited take. NMFS will work with Point Blue to determine what measures are necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. Pt. Blue may not resume the activities until notified by NMFS.

In the event that an injured or dead marine mammal is discovered and it is determined that the cause of the injury or death is unknown and the death is relatively recent (*e.g.*, in less than a moderate state of decomposition), Point Blue will immediately report the incident to the Office of Protected Resources, NMFS, and the West Coast Regional Stranding Coordinator, NMFS. The report must include the same information identified in the paragraph above IHA. Activities may continue while NMFS reviews the circumstances of the incident. NMFS will work with Point Blue to determine whether additional mitigation measures or modifications to the activities are appropriate.

In the event that an injured or dead marine mammal is discovered and it is determined that the injury or death is not associated with or related to the activities authorized in the IHA (*e.g.*, previously wounded animal, carcass with moderate to advanced decomposition, or scavenger damage), Point Blue will report the incident to the Office of Protected Resources, NMFS, and the West Coast Regional Stranding Coordinator, NMFS, within 24 hours of the discovery. Point Blue will provide photographs or video footage or other documentation of the stranded animal sighting to NMFS. Activities may continue while NMFS reviews the circumstances of the incident.

Negligible Impact Analysis and Determination

NMFS has defined negligible impact as an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival (50 CFR 216.103). A negligible impact finding is based on the lack of likely adverse effects on annual rates of recruitment or survival (*i.e.*, population-level effects). An estimate of the number of takes alone is not enough information on which to base an impact determination. In addition to considering estimates of the number of marine mammals that might be “taken” through harassment, NMFS considers other factors, such as the likely nature of any responses (*e.g.*, intensity, duration), the context of any responses (*e.g.*, critical reproductive time or location, migration), as well as effects on habitat, and the likely effectiveness of the mitigation. We also assess the number, intensity, and context of estimated takes by evaluating this information relative to population status. Consistent with the 1989 preamble for NMFS’s implementing regulations (54 FR 40338; September 29, 1989), the impacts from other past and ongoing anthropogenic activities are incorporated into this analysis via their impacts on the environmental baseline (*e.g.*, as reflected in the regulatory status of the species, population size and growth rate where known, ongoing sources of human-caused mortality, or ambient noise levels).

To avoid repetition, the discussion of our analyses applies generally to the four species for which take is authorized, given that the anticipated effects of these surveys on marine mammals are expected to be relatively similar in nature. Where there are species-specific factors that have been considered, they are identified below.

For reasons stated previously in this document and based on the following factors, NMFS does not expect Point Blue's specified activities to cause long-term behavioral disturbance that

would negatively impact an individual animal's fitness, or result in injury, serious injury, or mortality. Although Point Blue's survey activities may disturb marine mammals, NMFS expects those impacts to occur to localized groups of animals at or near survey sites. Behavioral disturbance would be limited to short-term startle responses and localized behavioral changes due to the short duration (ranging from <15 minutes for visits at most locations up to 2-5 hours from April-August at SEFI) of the research activities. At some locations, where resupply activities occur, visits will occur once every two weeks. Minor and brief responses, such as short-duration startle reactions or flushing, are not likely to constitute disruption of behavioral patterns, such as migration, nursing, breeding, feeding, or sheltering. These short duration disturbances - in many cases animals will return in 30 minutes or less - will generally allow marine mammals to reoccupy haul-outs relatively quickly; therefore, these disturbances would not be anticipated to result in long-term disruption of important behaviors. No surveys will occur at or near rookeries as researchers will have limited access to SEFI, ANI, and PRNS during the pupping season and will not approach sites should pups be observed. Furthermore, breeding animals tend to be concentrated in areas that researchers are not scheduled to visit. Therefore, NMFS does not expect mother and pup separation or crushing of pups during stampedes.

Level B behavioral harassment of pinnipeds may occur during the operation of small motorboats. However, exposure to boats and associated engine noise would be brief and would not occur on a frequent basis. Results from studies demonstrate that pinnipeds generally return to their sites and do not permanently abandon haul-out sites after exposure to motorboats. The chance of a vessel strike is very low due to small boat size and slow transit speeds. Researchers

will delay ingress into the landing areas until after the pinnipeds enter the water and will cautiously operate vessels at slow speeds.

In summary and as described above, the following factors primarily support our preliminary determination that the impacts resulting from this activity are not expected to adversely affect the species or stock through effects on annual rates of recruitment or survival:

- No mortality is anticipated or authorized;
- Limited behavioral disturbance in the form of short-duration startle reactions or flushing. Mitigation requirements employed by researchers (*e.g.* move slowly, use hushed voices) should further decrease disturbance levels;
- No activity near rookeries and avoidance of pups; and
- Limited impact from boats due to their small size, maneuverability and the requirement to delay ingress until after hauled out pinnipeds have entered the water.

Based on the analysis contained herein of the likely effects of the specified activity on marine mammals and their habitat, and taking into consideration the implementation of the proposed monitoring and mitigation measures, NMFS preliminarily finds that the total marine mammal take from the proposed activity will have a negligible impact on all affected marine mammal species or stocks.

Small Numbers

As noted above, only small numbers of incidental take may be authorized under Section 101(a)(5)(D) of the MMPA for specified activities other than military readiness activities. The MMPA does not define small numbers and so, in practice, NMFS compares the number of individuals taken to the most appropriate estimation of the relevant species or stock size in our determination of whether an authorization is limited to small numbers of marine mammals.

As mentioned previously, NMFS estimates that four marine mammal species could potentially be affected by Level B harassment under the proposed authorization. For each species, these numbers are small relative to the population size. These incidental harassment numbers represent approximately 13.5 percent of the U.S. stock of California sea lion, 1.28 percent of the California stock of Pacific harbor seal, 0.11 percent of the California breeding stock of northern elephant seal, and 0.05 percent of the eastern distinct population segment of Steller sea lion. Note that the number of individual marine mammals taken is assumed to be less than the take estimate (number of exposures) since we assume that the same animals may be behaviorally harassed over multiple days.

Table 4 Population Abundance Estimates, Total Proposed Level B Take, and Percentage of Population That May be Taken.

Species	Stock	Stock abundance	Total Proposed Level B Take	Percentage of Stock or Population
California sea lion	U.S.	296,750	40,138	13.5
Steller sea lion	Eastern U.S.	71,562	36	0.05
Harbor seal	California	30,968	399	1.28
Northern elephant seal	California breeding stock	179,000	203	0.11

Based on the analysis contained herein of the proposed activity (including the proposed mitigation and monitoring measures) and the anticipated take of marine mammals, NMFS preliminarily finds that small numbers of marine mammals will be taken relative to the population size of the affected species or stocks.

Unmitigable Adverse Impact Analysis and Determination

There are no relevant subsistence uses of the affected marine mammal stocks or species implicated by this action. Therefore, NMFS has determined that the total taking of affected species or stocks would not have an unmitigable adverse impact on the availability of such species or stocks for taking for subsistence purposes.

Endangered Species Act (ESA)

Section 7(a)(2) of the Endangered Species Act of 1973 (ESA: 16 U.S.C. § 1531 *et seq.*) requires that each Federal agency insure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of designated critical habitat. To ensure ESA compliance for the issuance of IHAs, NMFS consults internally with our ESA Interagency Cooperation Division whenever we propose to authorize take for endangered or threatened species.

No incidental take of ESA-listed species is proposed for authorization or expected to result from this activity. Therefore, NMFS has determined that formal consultation under section 7 of the ESA is not required for this action.

National Environmental Policy Act (NEPA)

To comply with the National Environmental Policy Act of 1969 (NEPA; 42 U.S.C. 4321 *et seq.*) and NOAA Administrative Order (NAO) 216-6A, NMFS must review our proposed action with respect to environmental consequences on the human environment.

Accordingly, NMFS has preliminarily determined that the issuance of the proposed IHA qualifies to be categorically excluded from further NEPA review. This action is consistent with categories of activities identified in CE B4 of the Companion Manual for NOAA Administrative Order 216-6A, which do not individually or cumulatively have the potential for significant

impacts on the quality of the human environment and for which we have not identified any extraordinary circumstances that would preclude this categorical exclusion.

We will review all comments submitted in response to this notice prior to concluding our NEPA process or making a final decision on the IHA request.

Proposed Authorization

As a result of these preliminary determinations, NMFS proposes to issue an IHA to Point Blue Conservation Science for conducting research surveys at SEFI, ANI, and PRNS from June 16, 2017 through June 15, 2018 provided the previously mentioned mitigation, monitoring, and reporting requirements are incorporated. This section contains a draft of the IHA itself. The wording contained in this section is proposed for inclusion in the IHA (if issued).

1. This IHA is valid from June 16, 2017 through June 15, 2018.
2. This IHA is valid only for specified activities associated with seabird and marine mammal monitoring surveys located on or near Southeast Farallon Island, Año Nuevo Island, and Point Reyes National Seashore.
3. Species Authorized and Level of Take.

a. The incidental taking of marine mammals, by Level B harassment only is limited to the following species and associated authorized take numbers as shown below:

- i. 399 harbor seal; (*Phoca vitulina richardii*);
- ii. 40,138 California sea lions (*Zalophus californianus*);
- iii. 36 Steller sea lions (*Eumetopias jubatus*); and
- iv. 203 northern elephant seals (*Mirounga angustirostris*).

b. The taking by injury (Level A harassment), serious injury, or death of any of the species listed in condition 3(a) of the IHA or any taking of any other species of marine mammal is prohibited and may result in the modification, suspension, or revocation of this IHA.

4. General Conditions

a. A copy of this Authorization must be in the possession of Point Blue, its designees, and field crew personnel (including research collaborators from Point Reyes National Seashore and Oikonos - Ecosystem Knowledge) operating under the authority of this IHA.

5. Mitigation Measures

The holder of this IHA is required to implement the following mitigation measures:

a. Slow approach to beaches for boat landings to avoid stampede and provide animals opportunity to enter water.

b. Select a pathway of approach to research sites that minimizes the number of marine mammals harassed.

c. Avoid visits to sites when pups are present.

d. Monitor for offshore predators and do not approach hauled out pinnipeds if great white sharks (*Carcharodon carcharias*) or killer whales (*Orcinus orca*) are observed. If Point Blue and/or its designees see pinniped predators in the area, they must not disturb the pinnipeds until the area is free of predators.

e. Keep voices hushed and bodies low to the ground in the visual presence of pinnipeds.

f. Conduct seabird observations at North Landing on Southeast Farallon Island in an observation blind, shielded from the view of hauled out pinnipeds.

g. Crawl slowly to access seabird nest boxes on Año Nuevo Island if pinnipeds are within view.

h. Coordinate research visits to intertidal areas of Southeast Farallon Island (to reduce potential take) and coordinate research goals for Año Nuevo Island to minimize the number of trips to the island.

i. Coordinate monitoring schedules on Año Nuevo Island, so that areas near pinnipeds would be accessed only once per visit.

j. Require beach landings on Año Nuevo Island only occur after any pinnipeds that might be present on the landing beach have entered the water.

k. Operate motorboats slowly with caution during approaches to landing sites in order to avoid vessel strikes.

l. Have the lead biologist serve as an observer to record incidental take.

6. Monitoring

The holder of this Authorization is required to:

a. Record the date, time, and location (or closest point of ingress) of each visit to the research site.

b. Collect the following information for each visit:

i. composition of the marine mammals sighted, such as species, gender and life history stage (*e.g.*, adult, sub-adult, pup);

ii. information on the numbers (by species) of marine mammals observed during the activities;

iii. estimated number of marine mammals (by species) that may have been harassed during the activities;

iv. behavioral responses or modifications of behaviors that may be attributed to the specific activities and a description of the specific activities occurring during that time (e.g., pedestrian approach, vessel approach); and

v. information on the weather, including the tidal state and horizontal visibility.

c. Observers will record marine mammal disturbances according to a three-point scale of intensity including:

(1) seal head orientation or brief movement in response to disturbance, which may include turning head towards the disturbance, craning head and neck while holding the body rigid in au-shaped position, changing from a lying to a sitting position, or brief movement of less than twice the animal's body length, "alert";

(2) movements in response to source of disturbance, ranging from short withdrawals at least twice the animal's body length to longer retreats over the beach, or if already moving a change of direction of greater than 90 degrees, "movement"; and

(3) all retreats (flushes) to the water, "flush".

(4) Observations of disturbance Levels 2 and 3 will be recorded as takes.

d. If applicable, note observations of marked or tag-bearing pinnipeds or carcasses, as well as any rare or unusual species of marine mammal.

e. If applicable, note the presence of any offshore predators (date, time, number, and species).

7. Reporting

The holder of this Authorization is required to:

a. Report observations of unusual behaviors of pinnipeds to the NMFS West Coast Region Office so that the appropriate personnel NMFS personnel may conduct any potential follow-up observations.

b. Submit a draft monitoring report to NMFS Office of Protected Resources by April 1, 2018 covering the time period of January 1, 2017 through December 31, 2017. A final report will be prepared and submitted within 30 days following resolution of any comments on the draft report from NMFS. If no comments are received from NMFS, the draft final report will be considered to be the final report

c. Reporting injured or dead marine mammals:

i. In the unanticipated event that the specified activity clearly causes the take of a marine mammal in a manner prohibited by this IHA, such as an injury (Level A harassment), serious injury, or mortality, Point Blue will immediately cease the specified activities and report the incident to the Office of Protected Resources, NMFS, and the West Coast Regional Stranding Coordinator, NMFS. The report must include the following information:

1. Time and date of the incident;
2. Description of the incident;
3. Environmental conditions (*e.g.*, wind speed and direction, Beaufort sea state, cloud cover, and visibility);
4. Description of all marine mammal observations and active sound source use in the 24 hours preceding the incident;
5. Species identification or description of the animal(s) involved;
6. Fate of the animal(s); and
7. Photographs or video footage of the animal(s).

Activities will not resume until NMFS is able to review the circumstances

of the prohibited take. NMFS will work with Point Blue to determine what measures are necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. Point Blue may not resume their activities until notified by NMFS.

ii. In the event that Point Blue discovers an injured or dead marine mammal, and the lead observer determines that the cause of the injury or death is unknown and the death is relatively recent (*e.g.*, in less than a modest state of decomposition), Point Blue will immediately report the incident to the Office of Protected Resources, NMFS, and the West Coast Regional Stranding Coordinator, NMFS. The report must include the same information identified in 6(c)(i) of this IHA. Activities may continue while NMFS reviews the circumstances of the incident. NMFS will work with Point Blue to determine whether additional mitigation measures or modifications to the activities are appropriate.

iii. In the event that Point Blue discovers an injured or dead marine mammal, and the lead observer determines that the injury or death is not associated with or related to the activities authorized in the IHA (*e.g.*, previously wounded animal, carcass with moderate to advanced decomposition, or scavenger damage), Point Blue will report the incident to the Office of Protected Resources, NMFS, and the West Coast Regional Stranding Coordinator, NMFS, within 24 hours of the discovery. Point Blue will provide photographs or video footage or other documentation of the stranded animal sighting to NMFS.

8. This Authorization may be modified, suspended or withdrawn if the holder fails to abide by the conditions prescribed herein, or if NMFS determines the authorized taking is having more than a negligible impact on the species or stock of affected marine mammals.

Request for Public Comments

We request comment on our analyses, the draft authorization, and any other aspect of this Notice of Proposed IHA for the proposed taking of marine mammals incidental to seabird and pinniped research activities in central California. Please include with your comments any supporting data or literature citations to help inform our final decision on the request for MMPA authorization.

Dated: May 11, 2017.

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

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