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**DEPARTMENT OF COMMERCE**

**National Oceanic and Atmospheric Administration**

**50 CFR Part 217**

**[Docket No. 200106-0004]**

**RIN 0648-BJ37**

**Take of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to Rocky Intertidal Monitoring Surveys Along the Oregon and California Coasts**

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

**ACTION:** Proposed rule; request for comments.

**SUMMARY:** NMFS has received a request from University of California Santa Cruz's Partnership for Interdisciplinary Studies of Coastal Oceans (UCSC/PISCO) for authorization to take marine mammals incidental to rocky intertidal monitoring surveys along the Oregon and California coasts. Pursuant to the Marine Mammal Protection Act (MMPA), NMFS is proposing regulations to govern that take, and requests comments on the proposed regulations. NMFS will consider public comments prior to making any final decision on the issuance of the requested MMPA authorization and agency responses will be summarized in the final notice of our decision.

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

**ADDRESSES:** You may submit comments on this document, identified by NOAA-NMFS-2020-0002, by any of the following methods:

- Electronic submission: Submit all electronic public comments via the Federal e-Rulemaking Portal. Go to *www.regulations.gov/#!docketDetail;D=NOAA-NMFS-2020-0002*, click the “Comment Now!” icon, complete the required fields, and enter or attach your comments.

Mail: Submit written comments to Jolie Harrison, Chief, Permits and Conservation Division, Office of Protected Resources, National Marine Fisheries Service, 1315 East West Highway, Silver Spring, MD 20910.

*Instructions:* Comments sent by any other method, to any other address or individual, or received after the end of the comment period, may not be considered by NMFS. All comments received are a part of the public record and will generally be posted for public viewing on *www.regulations.gov* without change. All personal identifying information (*e.g.*, name, address), confidential business information, or otherwise sensitive information submitted voluntarily by the sender will be publicly accessible. NMFS will accept anonymous comments (enter “N/A” in the required fields if you wish to remain anonymous). Attachments to electronic comments will be accepted in Microsoft Word, Excel, or Adobe PDF file formats only.

**FOR FURTHER INFORMATION CONTACT:** Dwayne Meadows, Ph.D., Office of Protected Resources, NMFS, (301) 427-8401. Electronic copies of the application and supporting documents, as well as a list of the references cited in this document, may be obtained online at: <https://www.fisheries.noaa.gov/permit/incidental-take-authorizations->

*under-marine-mammal-protection-act*. In case of problems accessing these documents, please call the contact listed above.

## **SUPPLEMENTARY INFORMATION:**

### **Availability**

A copy of UCSC/PISCO's application and any supporting documents, as well as a list of the references cited in this document, may be obtained online at:

[www.nmfs.noaa.gov/pr/permits/incidental/research.htm](http://www.nmfs.noaa.gov/pr/permits/incidental/research.htm). In case of problems accessing these documents, please call the contact listed above (see **FOR FURTHER INFORMATION CONTACT**).

### **Purpose and Need for Regulatory Action**

This proposed rule would establish a framework under the authority of the MMPA (16 U.S.C. 1361 *et seq.*) to allow for the authorization of take of marine mammals incidental to the UCSC/PISCO's rocky intertidal research activities in Oregon and California.

We received an application from the UCSC/PISCO requesting five-year regulations and authorization to take multiple species of marine mammals. Take would occur by Level B harassment incidental to visual disturbance of pinnipeds during research activities and use of research equipment. Please see "Background" below for definitions of harassment.

### *Legal Authority for the Proposed Action*

Section 101(a)(5)(A) of the MMPA (16 U.S.C. 1371(a)(5)(A)) directs 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 for up to five years if, after notice and public comment, the agency makes certain findings and issues regulations that set forth permissible methods of taking pursuant to that activity and other means of effecting the “least practicable adverse impact” on the affected species or stocks and their habitat (see the discussion below in the *Proposed Mitigation* section), as well as monitoring and reporting requirements. Section 101(a)(5)(A) of the MMPA and the implementing regulations at 50 CFR part 216, subpart I provide the legal basis for issuing this proposed rule containing five-year regulations, and for any subsequent Letters of Authorization (LOAs). As directed by this legal authority, this proposed rule contains mitigation, monitoring, and reporting requirements.

#### *Summary of Major Provisions within the Proposed Rule*

Following is a summary of the major provisions of this proposed rule regarding UCSC/PISCO’s rocky intertidal research activities. These measures include:

- Required implementation of mitigation to minimize impact to pinnipeds and avoid disruption to dependent pups including several measures to approach haulouts cautiously to minimize disturbance, especially when pups are present.
- Required monitoring of the research areas to detect the presence of marine mammals before initiating surveys.

#### **Background**

The MMPA prohibits the “take” of marine mammals, with certain exceptions. Sections 101(a)(5)(A) and (D) of the MMPA (16 U.S.C. 1361 *et seq.*) direct the Secretary of Commerce (as delegated to NMFS) 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, regulations are issued, and notice is provided to the public.

Authorization for incidental takings shall be granted if NMFS finds that the taking will have a negligible impact on the species or stock(s) and will not have an unmitigable adverse impact on the availability of the species or stock(s) for taking for subsistence uses (where relevant). Further, NMFS must prescribe the permissible methods of taking and other “means of effecting the least practicable adverse impact” on the affected species or stocks and their habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of the species or stocks for taking for certain subsistence uses (referred to, in shorthand, as “mitigation”); and requirements pertaining to the mitigation, monitoring and reporting of the takings are set forth.

The definitions of all applicable MMPA statutory terms cited above are included in the relevant sections below.

### **National Environmental Policy Act**

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 (*i.e.*, the issuance of a proposed rule (and subsequent LOAs)) with respect to potential impacts on the human environment. This action is consistent with categories of activities identified in Categorical Exclusion B4 (incidental harassment authorizations (IHAs) with no anticipated serious injury or mortality) 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. Accordingly, NMFS has preliminarily determined that the issuance of the proposed rule qualifies to be categorically excluded from further NEPA review. We will review all comments submitted in response to this proposed rule prior to concluding our NEPA process or making a final decision on the request.

### **Summary of Request**

On August 12, 2019, NMFS received a request from UCSC/PISCO for a proposed rule and LOA to take marine mammals incidental to rocky intertidal monitoring surveys along the Oregon and California coasts. After a series of revisions, the application was deemed adequate and complete on October 8, 2019. UCSC/PISCO's request is for take of a small number of California sea lion (*Zalophus californianus*), Harbor seals (*Phoca vitulina richardii*), Northern elephant seals (*Mirounga angustirostris*), and Steller sea lions (*Eumetopias jubatus*), by Level B harassment only. Neither UCSC/PISCO nor NMFS expects serious injury or mortality, or Level A harassment, to result from this activity.

NMFS previously issued seven IHAs to UCSC/PISCO for this work (77 FR 72327, December 5, 2012; 78 FR 79403, December 30, 2013; 79 FR 73048, December 9, 2014; 81 FR 7319, February 11, 2016; 82 FR 12568, March 6, 2017; 83 FR 11696, March 16, 2018; 84 FR 17784, April 26, 2019). UCSC/PISCO complied with all the requirements (*e.g.*, mitigation, monitoring, and reporting) of the previous IHAs and

information regarding their monitoring results may be found in the *Potential Effects of the Specified Activity on Marine Mammals* and their Habitat and *Estimated Take* sections.

## **Description of Proposed Activity**

### *Overview*

UCSC/PISCO proposes to continue rocky intertidal monitoring work that has been ongoing for over 20 years. UCSC/PISCO focuses on understanding the nearshore ecosystems of the U.S. west coast through a number of interdisciplinary collaborations. The program integrates long-term monitoring of ecological and oceanographic processes at dozens of sites with experimental work in the lab and field. Research is conducted throughout the year along the California and Oregon coasts and will continue indefinitely. Researchers accessing and conducting research activities on the sites may occasionally cause behavioral disturbance (or Level B harassment) of four pinniped species. UCSC/PISCO expects that the disturbance to pinnipeds from the research activities will be minimal and will be limited to Level B harassment.

### *Dates and Duration*

UCSC/PISCO's research is conducted throughout the year. Most sites are sampled one to two times per year over a 1 to 2-day period (4-6 hours per site) during a negative low tide series (when tides are lower than the average). Due to the large number of research sites, scheduling constraints, the necessity for negative low tides and favorable weather/ocean conditions, exact survey dates are variable and difficult to predict. Some sampling may occur in all months of the calendar year. Over the course of this five-year authorization UCSC/PISCO expects approximately 300 days of survey effort.

UCSC/PISCO's current IHA expires April 11, 2020, so these regulations are requested to be effective April 12, 2020 through April 11, 2025.

*Specific Geographic Region*

Sampling sites occur along the California and Oregon coasts. Community Structure Monitoring survey sites range from Ecola State Park near Cannon Beach, Oregon to Government Point located northwest of Santa Barbara, California. Biodiversity survey sites extend from Ecola State Park south to Cabrillo National Monument in San Diego County, California. Exact locations of sampling sites can be found in Table 1 and the maps of UCSC/PISCO's application.

*Detailed Description of Specific Activity*

Community Structure Monitoring surveys involve the use of permanent photoplot quadrats, which target specific algal and invertebrate assemblages (*e.g.* mussels, rockweeds, barnacles). Each photoplot is photographed and scored for percent cover. The Community Structure Monitoring approach is based largely on surveys that quantify the percent cover and distribution of algae and invertebrates that constitute these communities. This approach allows researchers to quantify both the patterns of abundance of targeted species, as well as characterize changes in the communities in which they reside. Such information provides managers with insight into the causes and consequences of changes in species abundance. There are a total of 48 Community Structure Monitoring sites, each of which will be visited one to two times per year (see Table 1 of the application for specifics for each site) under the proposed regulations and LOA and surveyed over a 1-day period during a low tide series.

Biodiversity Surveys are part of a long-term monitoring project and are conducted every 3-5 years across 143 established sites. These Biodiversity Surveys involve point contact identification along permanent transects, mobile invertebrate quadrat counts, sea star band counts, and tidal height topographic measurements. Many of the Biodiversity Survey sites are also Community Structure sites. Biodiversity survey sites will be sampled zero to five times during the course of these regulations and LOA (see Tables 3-6 in the application for details of expected survey frequency).

The intertidal zones where UCSC/PISCO conducts intertidal monitoring are also areas where pinnipeds can be found hauled out (temporarily leaving the water) on the shore at or adjacent to some research sites. Pinnipeds have been recorded at 63 of the survey sites. Accessing portions of the intertidal habitat at these locations may cause incidental Level B (behavioral) harassment of pinnipeds through some unavoidable approaches if pinnipeds are hauled out directly in the study plots or while biologists walk from one location to another or during occasions when they replace survey marker bolts using a hand drill. No motorized equipment is involved in conducting these surveys.

Proposed mitigation, monitoring, and reporting measures are described in detail later in this document (please see *Proposed Mitigation* and *Proposed Monitoring and Reporting*).

### **Description of Marine Mammals in the Area of Specified Activities**

Sections 3 and 4 of the application summarize available information regarding status and trends, distribution and habitat preferences, and behavior and life history, of the potentially affected species. Additional information regarding population trends and threats may be found in NMFS's Stock Assessment Reports (SARs;

<https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessments>) and more general information about these species (*e.g.*, physical and behavioral descriptions) may be found on NMFS's website (<https://www.fisheries.noaa.gov/find-species>).

Table 1 lists all species with expected potential for occurrence at survey sites in California and Oregon and summarizes information related to the population or stock, including regulatory status under the MMPA and Endangered Species Act (ESA) and potential biological removal (PBR), where known. For taxonomy, we follow Committee on Taxonomy (2018). PBR is 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 (as described in NMFS's SARs). While no mortality is anticipated or authorized here, PBR and annual serious injury and mortality from anthropogenic sources are included here as gross indicators of the status of the species and other threats.

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 or survey 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. For some species, this geographic area may extend beyond U.S. waters. All managed stocks in this region are assessed in NMFS's U.S. 2018 Pacific Marine Mammal SARs (Carretta *et al.* 2019). All values presented in Table 1 are the most recent available at the time of publication and are available in the 2018 SARs

(available online at: <https://www.fisheries.noaa.gov/national/marine-mammal-protection/draft-marine-mammal-stock-assessment-reports>).

**Table 1 Marine Mammals Potentially Present in the Vicinity of the Study Areas**

Common name	Scientific name	Stock	ESA/MMPA status; Strategic (Y/N) <sup>1</sup>	Stock abundance (CV, N <sub>min</sub> , most recent abundance survey) <sup>2</sup>	PBR	Annual M/SI <sup>3</sup>
Order Carnivora – Superfamily Pinnipedia						
Family Otariidae (eared seals and sea lions)						
California sea lion	<i>Zalophus californianus</i>	U.S.	-; N	257,606 (n/a; 233,515; 2014)	14,011	>320
Steller sea lion	<i>Eumetopias jubatus</i>	Eastern U.S.	-; N	41,638 (n/a; 41,638; 2015)	2,498	108
Family Phocidae (earless seals)						
Harbor seal	<i>Phoca vitulina richardii</i>	California/Oregon/Washington	-; N	30,968 (0.157; 27,348; 2012 [CA])/UNK (n/a; n/a [OR/WA]) <sup>4</sup>	1,641	43
Northern elephant seal	<i>Mirounga angustirostris</i>	California	-; N	179,000 (n/a; 81,368; 2010)	4,882	8.8

1 - Endangered Species Act (ESA) 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. Under the MMPA, a strategic stock is one for which the level of direct human-caused mortality exceeds PBR or which is determined to be declining and likely to be listed under the ESA within the foreseeable future. Any species or stock listed under the ESA is automatically designated under the MMPA as depleted and as a strategic stock.

2- NMFS marine mammal stock assessment reports online at: <https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessments>. CV is coefficient of variation; N<sub>min</sub> is the minimum estimate of stock abundance. In some cases, CV is not applicable.

3 - These values, found in NMFS's SARs, represent annual levels of human-caused mortality plus serious injury from all sources combined (e.g., commercial fisheries, ship strike). Annual M/SI often cannot be determined precisely and is in some cases presented as a minimum value or range. A CV associated with estimated mortality due to commercial fisheries is presented in some cases.

4 - The most recent abundance estimate is >8 years old, there is no current estimate of abundance available for this stock.

All species that could potentially occur in the proposed survey areas are included in Table 1. As described below, all four species temporally and spatially co-occur with the activity to the degree that take is reasonably likely to occur, and we have proposed authorizing it.

In addition, the southern sea otter may be found from San Francisco south to the Channel Islands. However, they are managed by the U.S. Fish and Wildlife Service and are not considered further in this document.

### *California Sea Lions*

California sea lions (*Zalophus californianus*) are distributed along the west coast of North America from British Columbia to Baja California and throughout the Gulf of California. Breeding occurs on offshore islands along the west coast of Baja California and the Gulf of California as well as on the California Channel Islands. There are three recognized California sea lion stocks (U.S. stock, Western Baja stock, and the Gulf of California stock) with the U.S. stock ranging from the U.S./Mexico border into Canada. Although there is some movement between stocks, U.S. rookeries are considered to be isolated from rookeries off of Baja California (Barlow *et al.* 1995).

California sea lions were hunted for several thousand years by indigenous peoples and early hunters. In the early 1900s, sea lions were killed in an effort to reduce competition with commercial fisheries. They were also hunted commercially from the 1920-1940s. Following the passage of the MMPA in 1972, as well as limits on killing and harassment in Mexico, the population has rapidly increased (Reeves *et al.* 2002). Declines in pup production did occur during the 1983-84, 1992-93, 1997-98, and 2003 El Niño events, but production returned to pre- El Niño levels within 2-5 years (Carretta *et al.* 2016). In 2013, NOAA declared an Unusual Mortality Event (UME) due to the elevated number of sea lion pup strandings in southern California. The cause of this event is thought to be nutritional stress related to declines in prey availability. This UME is on-

going. They have been observed in the project vicinity at 28 of the research sites (see application Table 4).

### *Steller Sea Lion*

Steller sea lions (*Eumetopias jubatus*) range along the North Pacific Rim from northern Japan to California, with centers of abundance and distribution in the Gulf of Alaska and Aleutian Islands. Large numbers of individuals widely disperse when not breeding (late May to early July) to access seasonally important prey resources (Muto *et al.* 2019). In 1997 NMFS identified two distinct population segments (DPSs) of Steller sea lions under the ESA: a Western DPS and an Eastern DPS (62 FR 24345, May 5, 1997). The Eastern DPS is not ESA listed, the Western DPS is. For MMPA purposes the Eastern DPS is called the Eastern U.S. stock and the Western DPS is called the Western U.S. stock. The Steller sea lions along the Oregon and California coasts are part of the Eastern Stock (and DPS). Steller sea lions are rare in the research areas. They have only been observed in the project vicinity at Cape Arago in 2009 and have not been observed during this research project since then.

### *Northern Elephant Seal*

Northern elephant seals (*Mirounga angustirostris*) range widely throughout the eastern Pacific for most of the year to forage. They return to haulout locations along the west coast of the continental United States including the Channel Islands, the central California coast, and islands off Baja California, to breed and molt. Breeding occurs from December through early spring, with males returning to haul-out locations earlier than females to establish dominance hierarchies. Molting occurs from late April to August, with juveniles and adult females returning earlier than adult males (Reeves *et al.* 2002).

Due to very little movement between colonies in Mexico and those in California, the California population is considered to be a separate stock (Carretta *et al.* 2019).

This species was hunted by indigenous peoples for several thousand years and by commercial sealers in the 1800s. By the late 1800s, the species was thought to be extinct, although several were seen on Guadalupe Island in the 1880s and a few dozen to several hundred survived off of Mexico (Stewart *et al.* 1994). The population began increasing in the early 1900s and progressively colonized southern and central California through the 1980s (Reeves *et al.* 2002). The species abundance has grown at 3.8 percent annually since 1988 (Lowry *et al.* 2014).

They have been observed in the project vicinity at 13 of the research sites (see application Table 5).

#### *Pacific Harbor Seal*

Pacific harbor seals (*Phoca vitulina richardii*) inhabit near-shore coastal and estuarine areas from Baja California, Mexico, to the Pribilof Islands in Alaska. They are divided into two subspecies: *P. v. stejnegeri* in the western North Pacific, near Japan, and *P. v. richardii* in the northeast Pacific Ocean. The latter subspecies, includes two MMPA stocks in the project area: the Oregon and Washington Coast stock in the outer coastal waters of Oregon and Washington states, and the California stock.

In Oregon there are over 40 haulout sites (Brown *et al.* 2005) while in California, over 500 harbor seal haulout sites are widely distributed along the mainland and offshore islands, and include rocky shores, beaches and intertidal sandbars (Lowry *et al.* 2005). Harbor seals mate at sea, and females give birth during the spring and summer, although, the pupping season varies with latitude. Pups are nursed for an average of 24 days and are

ready to swim minutes after being born. Harbor seal pupping takes place at many locations, and rookery size varies from a few pups to many hundreds of pups. Pupping generally occurs between March and June, and molting occurs between May and July.

A 1999 census of the Oregon/Washington harbor seal stock found 16,165 individuals, of which 5,735 were in Oregon (Carretta *et al.* 2016). The population was estimated to number 24,732 individuals in the Oregon/Washington stock (Carretta *et al.* 2016). However, the most recent abundance estimate for the Oregon/Washington stock is over 8 years old, therefore the abundance estimate for this stock is considered unofficial. They have been observed in the project vicinity at 49 of the research sites (see application Table 3).

### **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* section later in this document includes a quantitative analysis of the number of individuals that are expected to be taken by this activity. The *Negligible Impact Analysis and Determination* section considers the content of this section, the *Estimated Take* 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.

The appearance of researchers may have the potential to cause Level B behavioral harassment of any pinnipeds hauled out at sampling sites. Although marine mammals are never deliberately approached by survey personnel, approach may be unavoidable if pinnipeds are hauled out in the immediate vicinity of the permanent study plots.

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 haulout site into the water. NMFS does not consider the lesser reactions to constitute behavioral harassment, or Level B harassment takes, 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 (see below). 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.

Numerous studies have shown that human activity can flush harbor seals off haulout sites (Allen *et al.* 1985; 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). Moreover, 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).

There are three ways in which disturbance, as described previously, could result in more than Level B harassment of marine mammals. All three 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. The three situations are: (1) falling when entering the water at high-relief locations; (2) extended separation of mothers and pups; and (3) crushing of elephant seal pups by large males during a stampede. UCSC/PISCO researchers have only recorded one instance of stampeding, which occurred in 2013.

Because hauled out animals may move towards the water when disturbed, there is the risk of injury if animals stampede towards shorelines with precipitous relief (*e.g.*, cliffs). Shoreline habitats near the survey areas tend to consist of steeply sloping rocks with unimpeded and non-obstructed access to the water. Disturbed, hauled out animals in these situations are likely to move toward the water slowly without risk of unexpectedly falling off cliffs or encountering barriers or hazards or that would otherwise prevent them from leaving the area. Therefore, research activity poses no risk that disturbed animals may fall and be injured or killed as a result of disturbance at high-relief locations and thus there is no risk that these disturbances will result in Level A harassment or mortality/serious injury.

Few pups are anticipated to be encountered during the proposed monitoring surveys. A small number of harbor seal, northern elephant seal and California sea lion pups, however, have been observed during past years. Though elephant seal pups are occasionally present when researchers visit survey sites, risk of pup mortalities is very low because elephant seals are far less reactive to researcher presence than the other two species. Harbor seals are very precocious with only a short period of time in which separation of a mother from a pup could occur. Pups are also typically found on sand beaches, while study sites are located in the rocky intertidal zone, meaning that there is typically a buffer between researchers and pups. Finally, the caution used by researchers in approaching sites generally precludes the possibility of behaviors, such as stampeding, that could result in extended separation of mothers and dependent pups, or trampling of pups.

The only habitat modification associated with the proposed activity is the placement of permanent bolts and temporary sampling equipment in the intertidal zone. The installation of bolts and sampling equipment is conducted under the appropriate permits (National Marine Sanctuary, California State Parks). Once a particular study has ended, the respective sampling equipment is removed; the bolts remain. No trash or field gear is left at a site. Sampling activities are also not expected to result in any long-term modifications of haulout use or abandonment of haulouts since these sites are only visited one to two times per year, which minimizes repeated disturbances. During periods of low tide (*e.g.*, when tides are 0.6 m (2 ft) or less and low enough for pinnipeds to haulout), we would expect the pinnipeds to return to the haulout site within 60 minutes of the disturbance (Allen *et al.* 1985). The effects to pinnipeds appear at most to displace the animals temporarily from their haulout sites, and we do not expect, and have not observed during previous authorizations, that the pinnipeds would permanently abandon a haulout site during the conduct of rocky intertidal surveys. Additionally, impacts to prey species from survey activities are not anticipated. Thus, the proposed activity is not expected to have any habitat-related effects that could cause significant or long-term consequences for individual marine mammals or their populations.

### **Estimated Take**

This section provides an estimate of the number of incidental takes proposed for authorization through this IHA, which will inform both NMFS' consideration of "small numbers" and the negligible impact determination.

Harassment is the only type of take expected to result from these activities. Except with respect to certain activities not pertinent here, section 3(18) of 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. Based on the nature of the activity, Level A harassment is neither anticipated nor proposed to be authorized. As described previously, no mortality is anticipated or proposed to be authorized for this activity. Below we describe how the take is estimated.

#### *Marine Mammal Occurrence*

In this section we provide the information about the presence, density, or group dynamics of marine mammals that will inform the take calculations. Take estimates are based on historical marine mammal observations from 2013-2018 at each site from previous UCSC/PISCO survey activities. Marine mammal observations are done as part of research site observations, which include notes on physical and biological conditions at the site, completed on each study day. From 2013-2018 observations were categorized on a four point scale:

- 0 = observation by researchers from a distance, no reaction by pinniped
- 1 = pinniped reacted to presence of researchers with movement <1 meter
- 2 = pinniped reacted to presence of researchers with short movement of 1-3 meters
- 3 = pinniped flushed to the water or moved >3 meters in retreat

A marine mammal is counted as an “encounter” (at least level 0 on the above scale) if it is seen on access ways to the site, at the site, or immediately up-coast or down-coast of the site, regardless of whether that animal was considered a “take” under the MMPA. Marine mammals in the water immediately offshore are also recorded. Under the above scale, “take” was only considered to be level 2 or 3 observations from the above scale. The maximum number of marine mammals, by species, seen at any given time throughout the sampling day (categories 0 through 4) is recorded at the conclusion of sampling. Any other relevant information, including the location of a marine mammal relevant to the site, any unusual behavior, and the presence of pups is also noted.

#### *Take Calculation and Estimation*

The observations described above formed the basis from which researchers with extensive knowledge and experience at each site estimated the actual number of marine mammals that may be subject to take. Take estimates for each species for which take would be authorized were based on the following equation:

Take estimate per survey site = number of expected animals per site \* number of planned survey events per survey site

For take estimates, UCSC/PISCO summed the total number of marine mammals, by species, “encountered” at each research site during the period from 2013 to 2018 (*i.e.*, all observations score 0 to 4 on the above scale). We then summed the number of sampling events where marine mammals were encountered at each site and calculated the average number of encounters per event (see Tables 2-5). These are the “number of expected animals per site” for the equation above. Note the number of these historical encounters that qualified as Level B take was less than 40 percent of all encounters (see

application Section 6), so take estimates are expected to be conservative and consider potential temporal variation. The maximum number of planned survey events per survey site is listed in Tables 2-5. For Steller sea lions the one sighting from 2009 was used in this analysis. The take estimate by species per survey site calculation results can also be found in Tables 2-5.

**Table 2 Data and Calculations to Estimate Proposed Take of Harbor Seals**

Site	Encounters/Event	Expected Maximum # of Survey Events 2020-2024	Calculated Take 2020-2024
Andrew Molera	1	10	10
Boat House	5	10	50
Bob Creek	1	5	5
Bodega	9	5	45
Cat Rock	2	1	2
Cayucos	6	10	60
Del Mar Landing	5	1	5
Eel Point	1	2	2
Enderts	1	5	5
False Klamath Cove	1	5	5
Fitzgerald Marine Reserve	46	1	46
Fogarty Creek	8	5	40
Franklin Point	6	5	30
Government Point	38	10	380
Hopkins	14	10	140
Horseshoe Cove	6	1	6
Kibesillah Hill	8	5	40
Launcher Beach	10	1	10
MacKerricher	2	1	2
Mal Coombs	5	1	5
Mill Creek	1	10	10
Occulto	3	10	30

Old Home Beach	10	1	10
Partington Cove	2	10	20
Pebble Beach	16	5	80
Piedras Blancas	3	10	30
Point Arena	2	1	2
Point Lobos	1	10	10
Point Pinos	7	5	35
Point Sierra Nevada	1	10	10
Sandhill Bluff	1	10	10
Scott Creek	1	10	10
Sea Ranch	2	5	10
Sea Ridge	10	1	10
Shell Beach	1	10	10
Shelter Cove	4	5	20
Soberanes	2	10	20
Stillwater	9	10	90
Stornetta	3	5	15
Terrace Point	1	10	10
Treasure Island	6	1	6
Vista del Mar	12	10	120
Waddell	1	10	10
TOTAL	N/A	264	1466

**Table 3 Data and Calculations to Estimate Proposed Take of California Sea Lions**

Site	Encounters/Event	Expected Maximum # of Survey Events 2020-2024	Calculated Take 2020-2024
Bodega	3	5	15
Cape Arago	21	5	105
Crook Point	3	1	3
Cuyler Harbor	1	1	1
Del Mar Landing	1	1	1
Eel Point	2	2	4
Enderts	3	5	15

False Klamath Cove	2	5	10
Franklin Point	2	5	10
Government Point	11	10	110
Kibesillah Hill	2	5	10
Old Stairs	2	1	2
Piedras Blancas	25	10	250
Point Lobos	1	10	10
Point Pinos	1	5	5
Point Sierra Nevada	1	10	10
Purisma	1	5	5
Shell Beach	1	10	10
Soberanes	3	10	30
Stairs	1	10	10
Stornetta	2	5	10
Terrace Point	1	10	10
TOTAL	N/A	131	636

**Table 4 Data and Calculations to Estimate Proposed Take of Elephant Seals**

Site	Encounters/Event	Expected Maximum # of Survey Events 2020-2024	Calculated Take 2020-2024
Ano Nuevo	5	1	5
Chimney Rock	3	4	12
Crook Point	2	1	2
Cuyler Harbor	2	1	2
Government Point	3	10	30
Harmony Headlands	1	5	5
Mill Creek	1	10	10
Piedras Blancas	8	10	80
Point Sierra Nevada	1	10	10
TOTAL	N/A	50	156

**Table 5 Data and Calculations to Estimate Proposed Take of Steller Sea Lions**

Site	Encounters/Event	Expected Maximum # of Survey Events 2020-2024	Calculated Take 2020-2024
Cape Arago	5	5	25
TOTAL	N/A	5	25

Individual species’ totals for each survey site were summed to arrive at a total estimated take number for the entire project. This is the take that is proposed to be authorized here (Table 6).

**Table 6 Proposed Authorized Level B Take and Percent of MMPA Stock Proposed to Be Taken**

Species	Proposed Authorized Take	
	Level B	% of Population
Harbor Seal	1466	2.6
California sea lion	636	0.25
Northern elephant seal	156	0.09
Steller Sea Lion	25	0.06

**Proposed Mitigation**

In order to issue regulations and an LOA under Section 101(a)(5)(A) of the MMPA, NMFS must set forth the permissible methods of taking pursuant to the activity, and other means of effecting the least practicable impact on the species or stock and its habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of the species or stock for taking for certain subsistence uses (latter not applicable for this action). 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 the 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 consider 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. This considers the nature of the potential adverse impact being mitigated (likelihood, scope, range). It further considers the likelihood that the measure will be effective if implemented (probability of accomplishing the mitigating result if implemented as planned), the likelihood of effective implementation (probability implemented as planned), and;

(2) The practicability of the measures for applicant implementation, which may consider such things as cost and impact on operations.

UCSC/PISCO will implement several mitigation measures to reduce potential take by Level B (behavioral disturbance) harassment. Measures are listed below.

- Researchers will observe a site from a distance for at least five minutes, using binoculars if necessary, to detect any marine mammals prior to approach to determine if mitigation is required (*i.e.*, site surveys will not be conducted if other pinnipeds are present, researchers will approach with caution, walking slowly, quietly, and close to the ground to avoid surprising any hauled out individuals and to reduce flushing/stampeding of individuals).
- Researchers will avoid pinnipeds along access ways to sites by locating

and taking a different access way. Researchers will keep a safe distance from and not approach any marine mammal while conducting research, unless it is absolutely necessary to flush a marine mammal in order to continue conducting research (*i.e.* if a site cannot be accessed or sampled due to the presence of pinnipeds).

- Researchers will avoid making loud noises (*i.e.*, using hushed voices) and keep bodies low to the ground (crouched) in the visual presence of pinnipeds.
- Researchers will monitor the offshore area for predators (such as killer whales and white sharks) and avoid flushing of pinnipeds when predators are observed in nearshore waters. Note that UCSC/PISCO has never observed an offshore predator while researchers were present at any of the survey sites.
- Intentional approach will not occur if dependent pups are present to avoid mother/pup separation and trampling of pups. Staff shall reschedule work at sites where pups are present, unless other means of accomplishing the work can be done without causing disturbance to mothers and dependent pups.
- Researchers will promptly vacate sites at the conclusion of sampling.

The primary method of mitigating the risk of disturbance to pinnipeds, which will be in use at all times, is the selection of judicious routes of approach to study sites, avoiding close contact with pinnipeds hauled out on shore, and the use of extreme caution upon approach. Each visit to a given study site will last for approximately 4-6 hours, after which the site is vacated and can be re-occupied by any marine mammals that may have been disturbed by the presence of researchers. Also, by arriving before low tide, worker presence will tend to encourage pinnipeds to move to other areas for the day before they haul out and settle onto rocks at low tide.

Based on our evaluation of the applicant's proposed measures, 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 regulations and an LOA for an activity, Section 101(a)(5)(A) 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 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).
- Mitigation and monitoring effectiveness.

UCSC/PISCO will contribute to the knowledge of pinnipeds in California and Oregon 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 carcasses of pinnipeds, allowing transmittal of the information to appropriate agencies and personnel; and (3) rare or unusual species of marine mammals for agency follow-up.

Proposed monitoring requirements in relation to UCSC/PISCO's rocky intertidal monitoring will include observations made by the applicant. Information recorded will include species counts (with numbers of pups/juveniles) of animals present before approaching, numbers of observed disturbances (based on the scale below), and descriptions of the disturbance behaviors during the monitoring surveys, including location, date, and time of the event. For consistency, any reactions by pinnipeds to

researchers will be recorded according to a three-point scale shown in Table 7. Note that only observations of disturbance Levels 2 and 3 should be recorded as takes.

**Table 7 Levels of Pinniped Behavioral Disturbance**

<b>Level</b>	<b>Type of response</b>	<b>Definition</b>
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 away from 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.

In addition, observations regarding the number and species of any marine mammals observed, either in the water or hauled out, at or adjacent to a site, are recorded as part of field observations during research activities. Information regarding physical and biological conditions pertaining to a site, as well as the date and time that research was conducted are also noted. This information will be incorporated into a monitoring report for NMFS and raw data will be provided.

If at any time the specified activity clearly causes the take of a marine mammal in a manner prohibited by these regulations or LOA, such as an injury (Level A harassment), serious injury, or mortality, UCSC/PISCO shall 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) (if equipment is available).

Activities shall not resume until NMFS is able to review the circumstances of the prohibited take. NMFS will work with UCSC/PISCO to determine what measures are necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. UCSC/PISCO may not resume the activities until notified by NMFS via letter, email, or telephone.

In the event that UCSC/PISCO discovers an injured or dead marine mammal and determines 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), UCSC/PISCO shall 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. Activities may continue while NMFS reviews the circumstances of the incident. NMFS will work with UCSC/PISCO 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 regulations and LOA (*e.g.*, previously wounded animal, carcass with moderate to advanced decomposition, or scavenger damage), UCSC/PISCO shall report the incident to the Office of Protected Resources, NMFS, and the West Coast Regional Stranding Coordinator, NMFS, within 24 hours of the discovery. UCSC/PISCO shall provide photographs, video footage (if available) or other documentation of the stranded animal sighting to NMFS and the Marine Mammal Stranding Network. Activities may continue while NMFS reviews the circumstances of the incident.

A draft annual report shall be submitted to NMFS Office of Protected Resources within 90 days after the conclusion of each annual field season. The final annual report after year five may be included as part of the final report (see below). The report will include a summary of the information gathered pursuant to the monitoring requirements set forth above and in the LOA. A final annual report shall be submitted to the Director of the NMFS Office of Protected Resources within 30 days after receiving comments from NMFS on the draft annual report. If no comments are received from NMFS, the draft annual report will be considered the final report.

A draft final report shall be submitted to NMFS Office of Protected Resources within 60 days after the conclusion of the fifth year. A final report shall be submitted to the Director of the NMFS Office of Protected Resources and to the NMFS West Coast Regional Administrator within 30 days after receiving comments from NMFS on the draft final report. If no comments are received from NMFS, the draft final report will be considered the final report.

*Monitoring Results from Previously Authorized Activities*

UCSC/PISCO complied with the mitigation and monitoring that were required under the prior IHAs issued from 2013 to 2019. In compliance with those IHAs, they submitted reports detailing the activities and marine mammal monitoring they conducted. The IHAs required UCSC/PISCO to conduct counts of pinnipeds present at study sites prior to approaching the sites and to record species counts and any observed reactions to the presence of the researchers. These monitoring results were discussed above in the *Estimated Take* section.

Based on the results from the monitoring reports, we conclude that these results support our original findings that the mitigation measures set forth in the recent IHAs effected the least practicable impact on the species or stocks. There were no stampede events during these years and most disturbances were Level 1 and 2 from the disturbance scale (Table 3) meaning the animal did not fully flush but observed or moved slightly in response to researchers. Those that did fully flush to the water did so slowly. Most of these animals tended to observe researchers from the water and then re-haulout farther up-coast or down-coast of the site within approximately 30 minutes of the disturbance.

### **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 to all the species listed in Table 7, given that the anticipated effects of this activity on these different marine mammal stocks are expected to be similar. There is little information about the nature or severity of the impacts, or the size, status, or structure of any of these species or stocks that would lead to a different analysis for this activity. Research activities have the potential to disturb or displace marine mammals. Specifically, the project activities may result in take, in the form of Level B harassment from researchers movements and equipment handling. Potential takes could occur if individuals of these species are present nearby when these activities are underway.

No injuries or mortalities are anticipated to occur as a result of UCSC/PISCO's rocky intertidal monitoring surveys and none are proposed to be authorized. The risk of marine mammal injury, serious injury, or mortality associated with rocky intertidal monitoring increases somewhat if disturbances occur during breeding season. These

situations present increased potential for mothers and dependent pups to become separated and, if separated pairs do not quickly reunite, the risk of mortality to pups (e.g., through starvation) may increase. Separately, adult male elephant seals may trample elephant seal pups if disturbed, which could potentially result in the injury, serious injury, or mortality of the pups. Few pups are anticipated to be encountered during the proposed surveys. As shown in previous monitoring reports, however, limited numbers of harbor seal, northern elephant seal, and California sea lion pups have been observed at several sites during past years. Harbor seals are very precocious with only a short period of time in which separation of a mother from a pup could occur. Although elephant seal pups are occasionally present when researchers visit survey sites, risk of pup mortalities is very low because elephant seals are far less reactive to researcher presence compared to the other two species. Further, elephant seal pups are typically found on sand beaches, while study sites are located in the rocky intertidal zone, meaning that there is typically a buffer between researchers and pups. The caution used by researchers in approaching sites generally precludes the possibility of behavior, such as stampeding, that could result in extended separation of mothers and dependent pups or trampling of pups. Finally, UCSC/PISCO shall reschedule work at sites where pups are present, unless other means of accomplishing the work can be done without causing disturbance to mothers and dependent pups. The potential for harassment is further minimized through the approach method and the implementation of the planned mitigation measures (see *Proposed Mitigation* section).

Typically, even those reactions constituting Level B harassment would result at most in temporary, short-term behavioral disturbance. In any given study season,

researchers will visit select sites one to two times per year for 4-6 hours per visit. Therefore, disturbance of pinnipeds resulting from the presence of researchers lasts only for short periods. These short periods of disturbance lasting less than a day are separated by months or years. Community Structure sites are visited at most twice per year and the visits occur in different seasons. Biodiversity surveys take place at a given location once every 3-5 years.

Of the marine mammal species anticipated to occur in the proposed activity areas, none are listed under the ESA. Taking into account the planned mitigation measures, effects to marine mammals are generally expected to be restricted to short-term changes in behavior or temporary abandonment of haulout sites, pinnipeds are not expected to permanently abandon any area that is surveyed by researchers, as is evidenced by continued presence of pinnipeds at the sites during annual monitoring counts. No adverse effects to prey species are anticipated and habitat impacts are limited and highly localized, consisting of the placement of permanent bolts and temporary research equipment in the intertidal zone. 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 mitigation and monitoring measures, NMFS finds that the total marine mammal take from UCSC/PISCO's rocky intertidal monitoring program will not adversely affect annual rates of recruitment or survival and, therefore, will have a negligible impact on the affected species or stocks.

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 serious injury or mortality, or Level A harassment, is anticipated or authorized.
- Only a small number of pups are expected to be disturbed;
- Effects of the survey activities would be limited to short-term, localized behavioral changes;
- Nominal impacts to pinniped habitat are anticipated; and
- Mitigation measures are anticipated to be effective in minimizing the number and severity of takes by Level B harassment, which are expected to be of short duration.

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 Sections 101(a)(5)(A) of the MMPA for specified activities other than military readiness activities. The MMPA does not define small numbers and so, in practice, where estimated numbers are available, NMFS compares the number of individuals taken to the most appropriate estimation of abundance of the relevant species or stock in our determination of whether an authorization is limited to small numbers of marine

mammals. Additionally, other qualitative factors may be considered in the analysis, such as the temporal or spatial scale of the activities.

The amount of take NMFS proposes to authorize is 0.06 to 2.6 percent of any stock's best population estimate (Table 7). These are all likely conservative estimates because they assume all encounters result in take, which has not historically been the case. The Oregon/Washington stock of harbor seals has no official NMFS abundance estimate as the most recent estimate is greater than eight years old. Nevertheless, the most recent estimate was 27,348 animals and it is highly unlikely this number has drastically declined.

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 preliminarily 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.

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.

### **Request for Information**

NMFS requests interested persons to submit comments, information, and suggestions concerning the UCSC/PISCO request and the proposed regulations (see **ADDRESSES**). All comments will be reviewed and evaluated as we prepare a final rule and make final determinations on whether to issue the requested authorization. This notice and referenced documents provide all environmental information relating to our proposed action for public review.

### **Classification**

Pursuant to the procedures established to implement Executive Order 12866, the Office of Management and Budget has determined that this proposed rule is not significant.

Pursuant to section 605(b) of the Regulatory Flexibility Act (RFA), the Chief Counsel for Regulation of the Department of Commerce has certified to the Chief Counsel for Advocacy of the Small Business Administration that this proposed rule, if adopted, would not have a significant economic impact on a substantial number of small entities. UCSC/PISCO is the sole entity that would be subject to the requirements in these proposed regulations, and UCSC/PISCO is not a small governmental jurisdiction, small organization, or small business, as defined by the RFA. Because of this certification, a

regulatory flexibility analysis is not required and none has been prepared.

This proposed rule contains a collection-of-information requirement subject to the provisions of the Paperwork Reduction Act (PRA). Notwithstanding any other provision of law, no person is required to respond to nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the PRA unless that collection of information displays a currently valid OMB control number. These requirements have been approved by OMB under control number 0648-0151 and include applications for regulations, subsequent LOAs, and reports.

**List of Subjects in 50 CFR Part 219**

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

Dated: January 7, 2020.

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Samuel D. Rauch III,  
Deputy Assistant Administrator for Regulatory Programs,  
National Marine Fisheries Service.

For reasons set forth in the preamble, 50 CFR part 217 is proposed to be amended as follows:

**PART 217 – REGULATIONS GOVERNING THE TAKE OF MARINE MAMMALS INCIDENTAL TO SPECIFIED ACTIVITIES**

1. The authority citation for part 217 continues to read as follows:

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

2. Add subpart K to part 217 to read as follows:

**Subpart K – Taking Marine Mammals Incidental to Rocky Intertidal Monitoring Surveys Along the Oregon and California Coasts**

Sec.

§ 217.100 Specified activity and specified geographical region.

§ 217.101 Effective dates.

§ 217.102 Permissible methods of taking.

§ 217.103 Prohibitions.

§ 217.104 Mitigation requirements.

§ 217.105 Requirements for monitoring and reporting.

§ 217.106 Letters of Authorization.

§ 217.107 Renewals and modifications of Letters of Authorization.

§ 217.108 – 217.109 [Reserved]

**§ 217.100 Specified activity and specified geographical region.**

(a) Regulations in this subpart apply only to the University of California Santa Cruz's Partnership for Interdisciplinary Studies of Coastal Oceans (UCSC/PISCO) and those persons it authorizes or funds to conduct activities on its behalf for the taking of

marine mammals that occurs in the areas outlined in paragraph (b) of this section and that occur incidental to rocky intertidal monitoring research surveys.

(b) The taking of marine mammals by UCSC/PISCO may be authorized in a Letter of Authorization (LOA) only if it occurs on the coasts of Oregon or California.

**§ 217.101 Effective dates.**

Regulations in this subpart are effective from April 12, 2020 through April 11, 2025.

**§ 217.102 Permissible methods of taking.**

Under LOAs issued pursuant to § 216.106 of this chapter and § 217.106, the Holder of the LOA (hereinafter “UCSC/PISCO”) may incidentally, but not intentionally, take marine mammals within the area described in § 217.100(b) by Level B harassment associated with rocky intertidal monitoring activities, provided the activity is in compliance with all terms, conditions, and requirements of the regulations in this subpart and the appropriate LOA.

**§ 217.103 Prohibitions.**

Notwithstanding takings contemplated in § 217.100 and authorized by a LOA issued under § 216.106 of this chapter and § 217.106, no person in connection with the activities described in § 217.100 may:

(a) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or a LOA issued under § 216.106 of this chapter and § 217.106;

(b) Take any marine mammal not specified in such LOA;

(c) Take any marine mammal specified in such LOA in any manner other than as specified in § 217.102;

(d) Take a marine mammal specified in such LOA if NMFS determines such taking results in more than a negligible impact on the species or stocks of such marine mammal; or

(e) Take a marine mammal specified in such LOA if NMFS determines such taking results in an unmitigable adverse impact on the species or stock of such marine mammal for taking for subsistence uses.

**§ 217.104 Mitigation requirements.**

When conducting the activities identified in § 217.100(a), the mitigation measures contained in any LOA issued under § 216.106 of this chapter and § 217.106 must be implemented. These mitigation measures shall include but are not limited to:

(a) General conditions:

(1) Researchers will observe a site from a distance for at least five minutes, using binoculars if necessary, to detect any marine mammals prior to approach to determine if mitigation is required (*i.e.*, site surveys will not be conducted if other species of pinnipeds are present, researchers will approach with caution, walking slowly, quietly, and close to the ground to avoid surprising any hauled-out individuals and to reduce flushing/stampeding of individuals).

(2) Researchers will avoid pinnipeds along access ways to sites by locating and taking a different access way. Researchers will keep a safe distance from and not approach any marine mammal while conducting research, unless it is absolutely necessary to approach a marine mammal in order to continue conducting research (*i.e.*, if a site cannot be accessed or sampled due to the presence of pinnipeds).

(3) Researchers will avoid making loud noises (*i.e.*, using hushed voices) and

keep bodies low to the ground in the visual presence of pinnipeds.

(4) Researchers will monitor the offshore area for predators (such as killer whales and white sharks) and avoid flushing of pinnipeds when predators are observed in nearshore waters.

(5) Researchers will promptly vacate sites at the conclusion of sampling.

(b) Pup protection measure:

(1) Intentional approach will not occur if dependent pups are present to avoid mother/pup separation and trampling of pups. Staff shall reschedule work at sites where pups are present, unless other means of accomplishing the work can be done without causing disturbance to mothers and dependent pups.

(2) [Reserved]

#### **§ 217.105 Requirements for monitoring and reporting.**

(a) *Visual monitoring program.* (1) Standard information recorded will include species counts (with numbers of pups/juveniles when possible) of animals present before approaching, numbers of observed disturbances, and descriptions of the disturbance behaviors during the monitoring surveys, including location, date, and time of the event.

(2) UCSC/PISCO will note observations of:

(i) Unusual behaviors, numbers, or distributions of pinnipeds, such that any potential follow-up research can be conducted by the appropriate personnel;

(ii) Tag-bearing carcasses of pinnipeds, allowing transmittal of the information to appropriate agencies and personnel; and

(iii) Rare or unusual species of marine mammals for agency follow-up.

(3) For consistency, any reactions by pinnipeds to researchers will be recorded

according to a three-point scale shown in Table 1. Only observations of disturbance Levels 2 and 3 should be recorded as takes.

Table 1 to paragraph (a)(3) Levels of Pinniped Behavioral Disturbance.

<b>Level</b>	<b>Type of response</b>	<b>Definition</b>
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 away from 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.

(4) Information regarding physical and biological conditions pertaining to a site, as well as the date and time that research was conducted are also noted.

(b) *Prohibited Take.* (1) If at any time the specified activity clearly causes the take of a marine mammal in a manner prohibited by these regulations or LOA, such as an injury (Level A harassment), serious injury, or mortality, UCSC/PISCO shall 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:

- (i) Time and date of the incident;
- (ii) Description of the incident;

(iii) Environmental conditions (*e.g.*, wind speed and direction, Beaufort sea state, cloud cover, and visibility);

(iv) Description of all marine mammal observations in the 24 hours preceding the incident;

(v) Species identification or description of the animal(s) involved;

(vi) Fate of the animal(s); and

(vii) Photographs or video footage of the animal(s) (if equipment is available).

(2) Activities shall not resume until NMFS is able to review the circumstances of the prohibited take. NMFS will work with UCSC/PISCO to determine what measures are necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. UCSC/ PISCO may not resume the activities until notified by NMFS via letter, email, or telephone.

(c) *Notification of dead or injured marine mammals.* (1) In the event that UCSC/PISCO discovers an injured or dead marine mammal and determines 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), UCSC/PISCO shall immediately report the incident to the Office of Protected Resources, NMFS, and the West Coast Regional Stranding Coordinator, NMFS. The report must include the information identified in paragraph (b)(1) of this section. Activities may continue while NMFS reviews the circumstances of the incident. NMFS will work with UCSC/PISCO to determine whether additional mitigation measures or modifications to the activities are appropriate.

(2) 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 regulations and LOA (*e.g.*, previously wounded animal, carcass with moderate to advanced decomposition, or scavenger damage), UCSC/PISCO shall report the incident to the Office of Protected Resources, NMFS, and the West Coast Regional Stranding Coordinator, NMFS, within 24 hours of the discovery. UCSC/PISCO shall provide photographs, video footage (if available) or other documentation of the stranded animal sighting to NMFS and the Marine Mammal Stranding Network. Activities may continue while NMFS reviews the circumstances of the incident.

(d) *Annual report.* (1) A draft annual report shall be submitted to NMFS Office of Protected Resources within 90 days after the conclusion of each annual field season. The final annual report after year five may be included as part of the final report (see below). The report will include a summary of the information gathered pursuant to the monitoring requirements set forth above and in the LOA.

(2) A final annual report shall be submitted to the Director of the NMFS Office of Protected Resources within 30 days after receiving comments from NMFS on the draft annual report. If no comments are received from NMFS, the draft annual report will be considered the final report.

(e) *Final report.* (1) A draft final report shall be submitted to NMFS Office of Protected Resources within 60 days after the conclusion of the fifth year. A final report shall be submitted to the Director of the NMFS Office of Protected Resources and to the NMFS West Coast Regional Administrator within 30 days after receiving comments from NMFS on the draft final report. If no comments are received from NMFS, the draft final report will be considered the final report.

**§ 217.106 Letters of Authorization.**

(a) To incidentally take marine mammals pursuant to these regulations, UCSC/PISCO must apply for and obtain an LOA.

(b) An LOA, unless suspended or revoked, may be effective for a period of time not to exceed the expiration date of these regulations.

(c) If an LOA expires prior to the expiration date of these regulations, UCSC/PISCO may apply for and obtain a renewal of the LOA.

(d) In the event of projected changes to the activity or to mitigation and monitoring measures required by an LOA, UCSC/PISCO must apply for and obtain a modification of the LOA as described in § 217.107.

(e) The LOA shall set forth:

(1) Permissible methods and numbers of incidental taking;

(2) Means of effecting the least practicable adverse impact (*i.e.*, mitigation) on the species, its habitat, and on the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting.

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

(g) Notice of issuance or denial of an LOA shall be published in the **Federal Register** within thirty days of a determination.

#### **§ 217.107 Renewals and modifications of Letters of Authorization.**

(a) An LOA issued under § 216.106 of this chapter and § 217.106 for the activity identified in § 217.100(a) shall be renewed or modified upon request by the applicant, provided that:

(1) The proposed specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for these regulations (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section), and

(2) NMFS' Office of Protected Resources determines that the mitigation, monitoring, and reporting measures required by the previous LOA under these regulations were implemented.

(b) For an LOA modification or renewal requests by the applicant that include changes to the activity or the mitigation, monitoring, or reporting (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section) 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 years), NMFS' Office of Protected Resources may publish a notice of proposed LOA in the **Federal Register**, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) An LOA issued under § 216.106 of this chapter and § 217.106 for the activity identified in § 217.100(a) may be modified by NMFS' Office of Protected Resources under the following circumstances:

(1) Adaptive Management – NMFS' Office of Protected Resources may modify (including augment) the existing mitigation, monitoring, or reporting measures (after consulting with UCSC/PISCO regarding the practicability of the modifications) if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring set forth in the preamble for these regulations.

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

(A) Results from UCSC/PISCO's monitoring from the previous year(s).

(B) Results from other marine mammal and/or sound research or studies.

(C) Any information that reveals marine mammals may have been taken in a manner, extent or number not authorized by these regulations or subsequent LOAs.

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

(2) Emergencies – If NMFS' Office of Protected Resources 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 of this chapter and § 217.106, 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.

**§§ 217.108 – 217.109 [Reserved]**

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