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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 217

Docket No. 180411364-8364-01

RIN 0648-BH90

Taking and Importing Marine Mammals; Taking Marine Mammals Incidental to National Park Service's Research and Monitoring Activities in Southern Alaska National Parks

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 the National Park Service (NPS) for authorization to take marine mammals incidental to research and monitoring activities in southern Alaska over the course of five years (2019-2024). These activities include glaucous-winged gull and climate monitoring activities in Glacier Bay National Park (GLBA NP), Alaska and marine bird and mammal survey activities conducted by the Southwest Alaska Inventory and Monitoring Network (SWAN) in national parks and adjacent lands. As required by the Marine Mammal Protection Act (MMPA), NMFS is proposing regulations to govern that take and requests comments on the proposed regulations.

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-2018-0059, 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-2018-0059*, 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: Gray Redding, Office of Protected Resources, NMFS, (301) 427-8401.

SUPPLEMENTARY INFORMATION:

Availability

A copy of NPS's application and any supporting documents, as well as a list of the references cited in this document, may be obtained online at: *https://www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-*

authorizations-research-and-other-activities. In case of problems accessing these documents, please call the contact listed above (see **FOR FURTHER INFORMATION CONTACT**).

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 (*i.e.,* the issuance of an incidental take authorization) with respect to potential impacts on the human environment.

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. Accordingly, NMFS has preliminarily determined that the issuance of the proposed rule and subsequent Letters of Authorization qualifies to be categorically excluded from further NEPA review. We will review all comments submitted in response to this notice prior to concluding our NEPA process or making a final decision on the request.

Purpose and Need for Regulatory Action

This proposed rule, to be issued under the authority of the Marine Mammal Protection Act (MMPA) (16 U.S.C. 1361 *et seq*.), would establish a framework for authorizing the take of marine mammals incidental to NPS's gull and climate monitoring activities within GLBA NP and marine bird and mammal surveys in the SWAN region. Researchers conducting these surveys may cause behavioral disturbance (Level B harassment) of harbor seals and Steller sea lions.

We received an application from NPS requesting five-year regulations and authorization to take harbor seals and Steller sea lions. Take would occur by Level B harassment incidental to research and monitoring activities due to behavioral disturbance of pinnipeds. The regulations would be valid from 2019 to 2024. 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, 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. As directed by this legal authority, this proposed rule contains mitigation, monitoring, and reporting requirements.

Summary of Major Provisions within the Proposed Rule

The following provides a summary of some of the major provisions within the proposed rulemaking for NPS's research and monitoring activities in southern Alaska. We have preliminarily determined that NPS's adherence to the proposed mitigation, monitoring, and reporting measures listed below would achieve the least practicable adverse impact on the affected marine mammals. They include:

- Measures to minimize the number and intensity of incidental takes during monitoring activities and to minimize the duration of disturbances.

- Measures designed to eliminate startling reactions.
- Eliminating or altering research activities on GLBA NP beaches when pups are present, and setting limits on the frequency and duration of events during pupping season.

Background

Paragraphs 101(a)(5)(A) and (D) of the MMPA (16 U.S.C. 1371 (a)(5)(A) and (D)) 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 shall 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, adversely affect the species or stock through effects on annual rates of recruitment or survival. NMFS has defined "unmitigable adverse impact" in 50 CFR 216.103 as an impact resulting from the specified activity:

- That is likely to reduce the availability of the species to a level insufficient for a harvest to meet subsistence needs by:
  - Causing the marine mammals to abandon or avoid hunting areas;

- Directly displacing subsistence users; or

- Placing physical barriers between the marine mammals and the subsistence hunters; and

- That cannot be sufficiently mitigated by other measures to increase the availability of marine mammals to allow subsistence needs to be met.

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

On February 6, 2018, we received an adequate and complete request from NPS for authorization to take marine mammals incidental to gull and climate monitoring activities in GLBA NP. On February 22, 2018 (83 FR 7699), we published a notice of receipt of NPS's application in the **Federal Register**, requesting comments and information related to the request for 30 days. We did not receive any comments. NPS provided a revised application incorporating minor revisions on April 23, 2018. Subsequently, NPS has identified additional research and monitoring projects in southern Alaska (SWAN region) with similar sources of marine mammal disturbance and potential effects. On October 29, 2018, NMFS received an adequate and complete revised application including these additional research and monitoring activities. These additional activities were determined to be similar in scope and impact to the original

proposed activities, and NMFS determined that publication of a revised notice of receipt was not necessary for the updated application.

Prior to this request for incidental take regulations and subsequent Letters of Authorization (LOA), we issued five consecutive incidental harassment authorizations (IHA) to NPS for incidental take associated with the GLBA NP ongoing gull and climate monitoring activities. NPS was first issued an IHA, valid for a period of one year, effective on September 18, 2014 (79 FR 56065), and was subsequently issued one-year IHAs for incidental take associated with the same activities, effective on March 24, 2015 (80 FR 28229), June 1, 2016 (77 FR 24471), May 20, 2017 (82 FR 24681), and February 15, 2018 (83 FR 6842). NPS has abided by all of NMFS's mitigation and monitoring requirements in previous activities for which take was authorized.

Description of the Specified Activity

Glacier Bay

NPS is proposing to conduct two research projects within the GLBA NP in southeast Alaska: 1) glaucous-winged gull monitoring, and 2) the maintenance of a weather station operation for long-term climate monitoring. NPS would conduct ground and vessel surveys at six study sites within GLBA NP for gull monitoring: South Marble Island, Boulder Island, Lone Island, Geikie Rock, Flapjack Island, and Tlingit Point Islet. These sites will be accessed up to five times per year. In addition, NPS is requesting permission to access Lone Island an additional three times per year for weather station maintenance and operation bringing the total number of site visits to Lone Island to eight. This includes adding one additional trip for any emergency repairs that may be needed. Researchers accessing the islands for gull monitoring and weather station operation may cause behavioral disturbance (Level B harassment) of harbor

seals. NPS expects that the disturbance to harbor seals from both projects will be limited to Level B harassment.

The purpose for the above-mentioned research activities are as follows. Gull monitoring studies are mandated by a Record of Decision of a Legislative Environmental Impact Statement (LEIS) (NPS 2010) which states that NPS must initiate a monitoring program for glaucous-winged gulls (*Larus glaucescens)* to inform future native egg harvest by the Hoonah Tlingit in Glacier Bay, Alaska. Installation of a new weather station on Lone Island was conducted by the NPS in the spring of 2018 as one of several installations intended to fill coverage gaps among existing weather stations in GLBA NP (NPS 2015a). In order to properly maintain the newly installed weather station, researchers must access the Lone Island weather station site at least twice a year for annual maintenance and repairs.

SWAN

NPS is applying for an LOA to conduct the SWAN marine bird and mammal multi-species nearshore surveys along the coastlines of Katmai National Park and Preserve (KATM), Kenai Fjords National Park (KEFJ), and in Kachemak Bay (KBAY) in support of long-term monitoring programs in these regions of southwest Alaska. Occasional disturbance of Steller sea lions and harbor seals may occur during surveys. Steller sea lion and harbor seal habitat coincides with surveyed nearshore transects. Please see NPS's application for established transect locations for KATM and KEFJ and proposed transect locations for KBAY. NPS expects that the disturbance will be limited to Level B harassment and will not result in serious injury or death. SWAN also seeks to foster further collaborations with NOAA and share monitoring data in the future.

Dates and Duration

Glacier Bay

The specified activity would be valid during the five-year period of validity for these proposed regulations (March 1, 2019 through February 29, 2024). Ground and vessel surveys for nesting gulls will be conducted from May through September on bird nesting islands in GLBA NP (see Figure 1 of LOA Application) and other suspected gull colonies. There will be 1-3 ground visits and 1-2 vessel surveys at each site for a maximum of five visits per site. Duration of surveys will be 30 minutes to two hours each.

Maintenance of the Lone Island weather station may begin March 1, 2019. To avoid the gull-nesting period, all maintenance and emergency repair-related site visits to this location are planned to occur between March and April during the first year, and October to April in following years, but visits could occur outside of this time period if necessary with authorization from the park Superintendent to ensure protection of park resources and values. Possible unanticipated station failures requiring emergency repair will require up to eight hours. Two planned maintenance visits will require approximately two hours per visit.

SWAN

NPS's activities in the SWAN region would be valid during the five year period of validity for these proposed regulations (March 1, 2019 through February 29, 2024). Standardized surveys of marine birds are proposed in KATM and KEFJ between late June and early July and are generally conducted by two survey crews on independent small vessels (5-8 m length) traveling at speeds of 8-12 knots along randomly selected sections of coastline that represent independent transects. The two crews operate independently and do not survey the same transects. Winter surveys are conducted in March and consist of the same set of transects surveyed in the summer months. Only one region, either KATM or KEFJ, per winter season is

surveyed. Regions surveyed in the winter are on a rotation. Similar annual surveys are proposed in KBAY, with summer surveys occurring in June or July and no winter survey proposed. The survey of each area takes 3-4 days to complete with both crews operating.

Specified Geographical Region

Glacier Bay

The proposed study sites would occur in the vicinity of the following locations: South Marble, Boulder, Lone, and Flapjack Islands, Tlinglit Point Islet, and Geikie Rock in GLBA NP in southeast Alaska (see Figure 1 of LOA application). Each of these study sites are located on the eastern side of the park situated near Geikie Inlet and all provide harbor seal habitat throughout the year, however the highest presence of seals occurs during the breeding and molting season (May to October) (Lewis *et al.*, 2017). On Boulder and Flapjack islands, the proposed gull monitoring study sites are located on the north side whereas harbor seal haulouts are positioned on the south (Lewis *et al.*, 2017). Also, on Lone Island, harbor seals are sited near tidal rocks off the northeast tip of the island (ADEC, 2014), whereas on Geikie Rock they are known to be found throughout the entire site due to its small size (Lewis 2017). NPS will also conduct studies at South Marble Island and Tlingit Point Islet; however, there are no reported harbor seal haulout sites at those locations. South Marble Island is regularly occupied by hauled out Steller sea lions, but GLBA NP researchers have been able to access the island previously while maintaining 100 m minimum distance from the Steller sea lions and avoiding disturbance.

SWAN

The proposed surveys will occur at two national parks, KATM and KEFJ, as well as the nearby KBAY, in southwest AK. Detailed maps of the survey transects are available in the

NPS's LOA application. Transects are conducted 100 or 150 m from shore and have a total width of approximately 200 to 300 m centered on the vessel.

Detailed Description of Activities

Glacier Bay's Glaucous-winged gull monitoring

Gull monitoring will be conducted using a combination of ground and vessel surveys by landing at specific access points on the islands. NPS proposes to conduct: (1) ground-based surveys at a maximum frequency of three visits per site; and (2) vessel-based surveys at a maximum frequency of two visits per site during the period of May through September.

Ground-based surveys for gull monitoring will involve two trained observers conducting complete nest counts of the gull colonies. The survey will encompass all portions of the gull colony accessible to humans and thus represent a census of the harvestable nests. GPS locations of nests and associated vegetation along with the number of live and predated eggs will be collected during at least one visit to obtain precise nest locations to characterize nesting habitat. On subsequent surveys, nest counts will be tallied on paper so observers can move through the colony more quickly and minimize disturbance. Ground surveys will be discontinued after the first hatched chick is detected to minimize disturbance and mortalities of gulls. During ground surveys, observers will also record other bird and marine mammal species in proximity to colonies.

The observers would access each island using a kayak, a 32.8 to 39.4-foot (ft) (10 to 12 meter (m)) motorboat, or a 12 ft (4 m) inflatable rowing dinghy. The landing craft's transit speed would not exceed 4 knots (kn) (4.6 miles per hour (mph)). Ground surveys generally last 30 minutes (min) to two hours (hrs) each depending on the size of the island and the number of nesting gulls. During ground surveys, Level B harassment of harbor seals can occur from either

acoustic disturbance from motorboat sounds or visual disturbance from the presence of observers. Past monitoring reports show that most takes (flushes or movements greater than one meter) from ground surveys occurred as vessels approached a study site to perform a survey. Takes usually occurred while the vessel was 50-100 meters from the island (NPS 2015b; NPS 2016).

Vessel-based surveys for gull monitoring will be conducted from the deck of a motorized vessel (10 to 12 meters) and will be used to count the number of adult and fledgling gulls that are visible from the water (Zador, 2001; Arimitsu *et al.*, 2007). Vessel surveys provide a more reliable estimate of the numbers of gulls in the colony than ground surveys because NPS can count nesting birds in areas that are inaccessible by foot and because the birds do not flush from the researchers' presence. GLBA NP would conduct these surveys by circling the islands at approximately 100 m from shore while counting the number of adult and chick gulls as well as other bird and mammal species present. Surveys can be from 30 min to two hrs in duration. During vessel surveys, Level B harassment of harbor seals can occur from either acoustic disturbance from motorboat sounds or visual disturbance from the presence of observers. Past monitoring reports show that most takes (flushes or movements greater than one meter) from vessel surveys occurred as the vessel was 100 m from the island (NPS 2015b; NPS 2016).

Glacier Bay's Climate Monitoring (Weather Station Maintenance)

To conduct climate monitoring and weather station maintenance activities, Lone Island will be accessed by a 10-20 m motor vessel. Materials will be carried by hand to the weather station location. Station configuration and maintenance is typical of Remote Automated Weather Stations (RAWS) operated by land management agencies for weather and climate monitoring, fire weather observation, and other uses. The weather station consists of an 8-ft monopole and

associated guy lines. In addition, there is a fuel cell and sealed 12V battery housed in a watertight enclosure that provides power to the station. Standard meteorological sensors for measuring precipitation, wind, temperature, solar radiation, and snow depth are used. Data is housed in internal memory and communicated via satellite telemetry to the Wildland Fire Management Institute where it is relayed to a variety of repositories such as the Western Regional Climate Center in near real-time. It is possible that the weather station can be accessed in a fashion that will not disturb hauled out harbor seals. However NPS is requesting authorization to ensure its ability to perform yearly maintenance of the weather station.

SWAN Marine Bird and Marine Mammal Surveys

SWAN standardized surveys of marine birds are conducted in KATM and KEFJ between late June and early July and are generally conducted from small vessels (5-8 m length) traveling at speeds of 8-12 knots along randomly selected sections of coastline that represent independent transects. SWAN is also proposing similar surveys be implemented in KBAY in cooperation with USGS and Gulf Watch Alaska. The survey design consists of a series of transects along shorelines such that a minimum of 20 percent of an NPS park shoreline is surveyed. Transects are systematically selected beginning at a random starting point from the pool of contiguous 2.5-5 km transects that are adjacent to the mainland or islands. The transect width is 200 – 300 m, depending on the elevation of the observer platform, and the survey boat represents the midpoint. There are two survey teams, and each transect is surveyed by one team of three. The boat operator generally surveys the 100 - 150 m offshore area of the transect, while a second observer surveys the 100 - 150 m nearshore area. The third team member enters the observations into a laptop running software specifically designed for this type of surveying, and the third team member can assist with observations when needed. All marine birds and mammals within the

200 - 300 m transect swath are identified and counted. Detailed descriptions of methods and procedures can be found in the Marine Bird and Mammal Survey SOP (Bodkin 2011).

Description of Marine Mammals in the Area of the Specified Activity

Sections 3 and 4 of the LOA 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 (SAR; *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 within the survey areas 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 the Committee on Taxonomy (2017). 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. Alaska SARs (Muto *et al.*, 2018). All values presented in Table 1 are the most recent available at the time of publication and are available in the 2017 SARs (Muto *et al.*, 2018).

Table 1. Marine Mammals that Could Occur in the Project Area.

Common name	Scientific name	Stock	ESA/MMPA status; Strategic (Y/N)[1]	Stock abundance (CV, N_{min}, most recent abundance survey)[2]	PBR	Annual M/SI[3]
Order Carnivora – Superfamily Pinnipedia						
Family Otariidae (eared seals and sea lions)						
Steller sea lion	*Eumetopias jubatus*	Eastern U.S.	-/-; N	41,638 (n/a, 41,638, 2015)[4]	306	236
		Western U.S.	E/D; Y	54,267 (n/a; 54,267; 2017)[4]	326	252
Family Phocidae (earless seals)						
Harbor seal	*Phoca vitulina richardii*	Glacier Bay / Icy Strait	-/-; N	7,210 (n/a.; 5,647; 2011)[4]	169	104
		Cook Inlet/Shelikof Strait	-/-; N	27,386 (n/a; 25,651; 2011)[4]	770	234
		Prince William Sound	-/-; N	29,889 (n/a; 27,936; 2011)[4]	838	279

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; Nmin is the minimum estimate of stock abundance. In some cases, CV is not applicable (n/a)
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.
4 – CV value not reported in SARs

All marine mammal species that could potentially occur in the proposed survey areas are included in Table 1. While cetaceans, including humpback, beluga, and killer whales, may be

present in nearby waters, NPS's activities are expected to result in harassment only for hauled out pinnipeds. Therefore, cetaceans are not considered further in this analysis. However, NPS does propose cetacean avoidance measures as described in the "Proposed Mitigation" section below. Finally, sea otters may be found throughout the proposed project area. However, sea otters are managed by the U.S. Fish and Wildlife Service and are not considered further in this document.

Steller Sea Lions

The Steller sea lion is the largest of the eared seals, ranging along the North Pacific Rim from northern Japan to California, with centers of abundance and distribution in the Gulf of Alaska and Aleutian Islands. Steller sea lions were listed as threatened range-wide under the ESA on November 26, 1990 (55 FR 49204). Subsequently, NMFS published a final rule designating critical habitat for the species as a 20 nautical mile buffer around all major haulouts and rookeries, as well as associated terrestrial, air and aquatic zones, and three large offshore foraging areas (58 FR 45269; August 27, 1993). In 1997, NMFS reclassified Steller sea lions as two distinct population segments (DPS), or stocks, based on genetic studies and other information (62 FR 24345; May 5, 1997). Steller sea lion populations that primarily occur west of 144° W (Cape Suckling, Alaska) comprise the western stock, while all others comprise the eastern stock; however, there is regular movement of both stocks across this boundary (Jemison *et al.*, 2013). Upon this reclassification, the western DPS, or stock, was listed as endangered while the eastern DPS, or stock, remained as threatened (62 FR 24345; May 5, 1997) and in November 2013, the eastern DPS was delisted (78 FR 66140).

Steller sea lions are not known to migrate, but individuals may disperse widely outside the breeding season (late May to early July). At sea, Steller sea lions are commonly found from

nearshore habitats to the continental shelf and slope. The western stock breeds on rookeries in Alaska from Prince William Sound west through the Aleutian Islands. Steller sea lions use 38 rookeries and hundreds of haulouts within their range in western Alaska (Allen and Angliss 2013). The eastern stock originates from rookeries east of Cape Suckling, Alaska, and can be found between southeast Alaska and California.

SWAN

SWAN's activities all occur west of the 144° W line that splits the two Steller sea lion stocks, but there is some mixing across that boundary. Steller sea lions impacted by NPS' research and monitoring activities could belong to either stock, and it is not possible to determine which stock a Steller sea lion belongs to by simple observation. Both stocks of Steller sea lions are therefore considered in this analysis.

SWAN surveys occur in areas with known Steller sea lion haulouts and there are two rookeries in KEFJ (see application). KATM and KEFJ shorelines are both within Steller sea lion critical habitat including the aquatic zone (or buffer) that extends 37 kilometers (20 nautical miles) seaward in all directions from each rookery and major haulout. Critical habitat also includes three large offshore foraging areas: the Shelikof Strait area, the Bogoslof area, and the Seguam Pass area (58 FR 45269) with only the Shelikof Strait area relevant to this action. Steller sea lions are sometimes present in KBAY, but the area is not critical habitat. Regulations prevent approach by vessel to within three nautical miles of major rookeries (50 CFR 224.103).

Glacier Bay

The temporal and/or spatial occurrence of Steller sea lions is such that take is not expected to occur in GLBA NP research sites and researchers would not approach Steller sea lions. Steller sea lions which occur in GLBA NP are generally found on South Marble Island

(see Figure 1 in the Application). No disturbance of Steller sea lions is expected from GLBA NP activities, so their presence in the area is not discussed beyond the information provided here.

A total of five Steller sea lions have been observed during the 2015, 2016, and 2017 GLBA NP gull survey seasons (climate monitoring did not take place during these years) (NPS 2015b; NPS 2016; NPS 2017). However, all Steller sea lions that were spotted were observed outside the study area. Steller sea lions are present in GLBA NP, but are not generally seen on the islands being researched. NPS has proposed mitigation, including staying at least 100 m away from all Steller sea lions (see Proposed Mitigation), which has been found to be sufficient to avoid take by Level B harassment due to Steller sea lions' tolerance of vessels and lack of response to humans from a distance.

Harbor Seals

Harbor seals are the most abundant marine mammal species found within the action area and are present year-round. Harbor seals range from Baja California north along the west coasts of Washington, Oregon, California, British Columbia, and Southeast Alaska; west through the Gulf of Alaska, Prince William Sound, and the Aleutian Islands; and north in the Bering Sea to Cape Newenham and the Pribilof Islands. The current statewide abundance estimate for Alaskan harbor seals is 205,090 (Muto *et al.*, 2017), based on aerial survey data collected during 1998-2011. In 2010, harbor seals in Alaska were partitioned into 12 separate stocks based largely on genetic structure (Allen and Angliss, 2010). Harbor seals have declined dramatically in some parts of their range over the past few decades, while in other parts their numbers have increased or remained stable over similar time periods.

Harbor seals haul out on rocks, reefs, beaches, and drifting glacial ice (Allen and

Angliss, 2014). They are non-migratory; their local movements are associated with tides, weather, season, food availability, and reproduction, as well as sex and age class (Allen and Angliss, 2014; Boveng *et al.*, 2012; Lowry *et al.*, 2001; Swain *et al.*, 1996). Pupping in Alaska generally takes place in May and June; while molting generally occurs from June to October.

Glacier Bay Stock/Icy Strait Stock

Harbor seals of Glacier Bay range from Cape Fairweather southeast to Column Point, extending inland to Glacier Bay, Icy Strait, and from Hanus Reef south to Tenakee Inlet (Muto *et al.*, 2017). This is the only stock that would be impacted by research and monitoring activities in GLBA NP. The Glacier Bay/Icy Strait stock showed a negative population trend from 1992 to 2008 in June and August for glacial (-7.7 percent /year; -8.2 percent/year) and terrestrial sites (-12.4 percent/year, August only) (Womble *et al.*, 2010 as cited in Muto *et al.*, 2017). Trend estimates by Mathews and Pendleton (2006) were similarly negative for both glacial and terrestrial sites. Prior to 1993, seal counts were up to 1,347 in the East Arm of Glacier Bay; 2008 counts were fewer than 200 (Streveler, 1979; Molnia, 2007 as cited in Muto *et al.*, 2017). These observed declines in harbor seals resulted in new research efforts which were initiated in 2004 and were aimed at trying to further understand the biology and ecology of seals and possible factors that may have contributed to the declines (*e.g.*, Herreman *et al.* 2009, Blundell *et al.* 2011, Hueffer *et al.* 2012, Womble and Gende 2013a, Womble *et al.* 2014), with an emphasis on possible factors that may have contributed to the declines. The recent studies suggest that (1) harbor seals in Glacier Bay are not significantly stressed due to nutritional constraints (Blundell *et al.* 2011), (2) the clinical health and disease status of seals within Glacier Bay is not different than seals from stable or increasing populations (Hueffer *et al.* 2012), and (3) disturbance by vessels does not appear to be a primary factor driving the decline (Young 2009).

Long-term monitoring of harbor seals on glacial ice has occurred in Glacier Bay since the 1970s (Mathews and Pendleton, 2006) and has shown this area to support one of the largest breeding aggregations in Alaska (Steveler, 1979; Calambokidis *et al.*, 1987 as cited in Muto *et al.*, 2015). After a large scale retreat of the Muir Glacier (more than 7 km), in the East Arm of Glacier Bay, between 1973 and 1986 and the subsequent grounding and cessation of calving in 1993, floating glacial ice was greatly reduced as a haulout substrate for harbor seals and ultimately resulted in the abandonment of upper Muir Inlet by harbor seals (Calambokidis *et al.*, 1987; Hall *et al.*, 1995; Mathews, 1995 as cited in Muto *et al.*, 2017). The most recent long-term trend estimate for harbor seals at terrestrial sites in Glacier Bay for the 22-year period from 1992-2013 is -6.91 percent / year (SE=0.40, 95% CI = -7.69, -6.13) (Womble *et al.* 2015). This trend is less negative than previous estimates stated in the paragraph above. In addition, from 2004-2013, there was a 10-year trend estimate of 9.64 percent increase per year (SE=1.66, 95% CI = 6.40, 12.89) (Womble *et al.*, 2015).

Results from satellite telemetry studies suggest that harbor seals travel extensively beyond the boundaries of Glacier Bay during the post-breeding season (September-April); however, harbor seals demonstrated a high degree of inter-annual site fidelity (93 percent) to Glacier Bay the following breeding season (Womble and Gende 2013b). Spatial and temporal regulations, for vessels transiting in and near harbor seal breeding areas, and operating regulations, for vessels operating within those areas, are all aimed at reducing the impacts of human visitation.

Harbor seals from the Glacier Bay/Icy Strait stock can be found hauled out at four of the gull monitoring study sites (Table 2). Seal counts from gull monitoring surveys likely represent a

minimum estimate due to difficulty observing marine mammals from a vessel. Counts from gull monitoring surveys are conducted during high tide so fewer seals may be present.

Table 2. Number of observed harbor seals and taken by Level B harassment for the species under IHAs at gull study sites from 2015-2017 in GLBA NP.

Site Name	Latitude (dd)	Longitude (dd)	2015 Observed/Taken	2016 Observed/Taken	2017 Observed/ Taken
Boulder	58.55535	-136.01814	13/11	21/0	4/0
Flapjack	58.58698	-135.98251	0/0	101/41	0/0
Geikie	58.69402	-136.31291	45/14	37/0	33/33
Lone	58.72102	-136.29470	98/32	58/39	49/0
TOTAL			**156/57**	**217/80**	**86/33**

As alluded to, there can be greater numbers of seals on the survey islands than what is detected by the NPS during the gull surveys. Aerial survey maximum counts show that harbor seals sometimes haul out in large numbers at all four locations (see Table 2 of the application). However, harbor seals hauled out at Flapjack Island are generally on the southern end whereas the gull colony is on the northern end. Similarly, harbor seals on Boulder Island tend to haul out on the southern end while the gull colony is located and can be accessed on the northern end without causing disturbance of harbor seals. Aerial survey counts for harbor seals are conducted during low tide while ground and vessel surveys are conducted during high tide which, along with greater visibility during aerial surveys, may also contribute to the greater numbers of seals observed during the aerial surveys because there is more land available to use as a haulout during low tide.

Prince William Sound Stock

The Prince William Sound stock includes harbor seals both within and adjacent to Prince William Sound proper from approximately Cape Fairweather to Elizabeth Island, including the KEFJ survey area. Within Prince William Sound proper, harbor seals declined in abundance by 63 percent between 1984 and 1997 (Frost et al. 1999). In Aialik Bay, adjacent to Prince William

Sound proper, there has been a decline in pup production by 4.6 percent annually from 40 down to 32 pups born from 1994 to 2009 (Hoover-Miller et al. 2011). The current (2007–2011) estimate of the Prince William Sound population trend over a 5-year period is +26 seals per year with a probability that the stock is decreasing of 0.56. The presence of an increasing trend with a greater than .5 probability of decreasing is due to skewness impacting statistical estimates. This occurrence is discussed further in Muto *et al.* (2018).

From 1992 – 1997, results from a satellite telemetry study showed Prince William Sound harbor seals tended to remain in or near Prince William Sound. Juvenile seals were occasionally found to range up to 300 to 500 km east and west into the Gulf of Alaska. In June and July, when SWAN region surveys would occur, harbor seals tended to have their smallest home range sizes, remaining nearer to their haulout than other times of year (Lowry et al. 2001).

Cook Inlet / Shelikof Strait Stock

The Cook Inlet/Shelikof Strait stock includes harbor seals from approximately Elizabeth Island to Unimak Island, as well as those within Cook Inlet. Multiple harbor seal haulouts exist in KBAY and KATM (London et al, 2015; Montgomery et al 2007). This stock of harbor seals would be found in the KATM and KBAY survey areas of SWAN's activities. A multi-year study of seasonal movements and abundance of harbor seals in Cook Inlet was conducted between 2004 and 2007. This study involved multiple aerial surveys throughout the year, and the data indicated a stable population of harbor seals during the August molting period (Boveng et al. 2011). Aerial surveys along the Alaska Peninsula present greater logistical challenges and have therefore been conducted less frequently. The current (2007-2011) estimate of the Cook Inlet/Shelikof Strait population trend is +313 seals per year, with a probability of 0.38 that the stock is decreasing (Muto *et al.* 2018).

Potential Effects of the Specified Activity 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.

As previously stated, acoustic and visual stimuli generated by motorboat operations and the presence of researchers have the potential to cause Level B harassment of harbor seals hauled out on Boulder, Lone, and Flapjack Islands, and Geikie Rock within GLBA NP. These same stimuli generated by motorboat operations have the potential to cause Level B harassment of harbor seals and Steller sea lions in KATM, KEFJ, and KBAY. The following discussion provides further detail on the potential visual and acoustic disturbances harbor seals and Steller sea lions may encounter during the NPS' research and monitoring activities.

Human and Vessel Disturbance

Harbor seals and Steller sea lions may potentially experience behavioral disruption rising to the level of harassment from monitoring and research activities, which may include brief periods of airborne noise from research vessels and visual disturbance due to the presence and activity of the researchers both on vessels and on land during ground surveys. Disturbed pinnipeds are likely to experience any or all of these stimuli, and take may occur due to any in both isolation or combined with one another. Due to the likely constant combination of visual

and acoustic stimuli resulting from the presence of vessels and researchers, we do not consider impacts from acoustic and visual stimuli separately.

Disturbances resulting from human activity can impact short- and long-term pinniped haul out behavior (Renouf *et al.*, 1981; Schneider and Payne, 1983; Terhune and Almon, 1983; Allen *et al.*, 1984; Stewart, 1984; Suryan and Harvey, 1999; and Kucey and Trites, 2006). Disturbance includes a variety of effects, including subtle to conspicuous changes in behavior, movement, and displacement. Reactions to sound, if any, depend on the species, state of maturity, experience, current activity, reproductive state, time of day, and many other factors (Richardson *et al.*, 1995; Wartzok *et al.*, 2004; Southall *et al.*, 2007; Weilgart, 2007). These behavioral reactions from marine mammals are often shown as: changing durations of surfacing and dives, 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 haulouts 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).

Visual stimuli resulting from the presence of researchers and vessels have the potential to result in take of harbor seals and Steller sea lions on the research islands and coasts where these pinnipeds haul out. The characteristics of these stimuli differ between the GLBA NP and SWAN activities. In SWAN's activities, vessels move at faster speeds (8-12 kn, vs 2-3 kn for GLBA

NP) but are present for a short time period transiting through an area and at a consistent distance. Alternatively, while GLBA NP vessels are slower, they must approach islands where pinnipeds may be hauled out, and both the vessel and researchers will be present for a longer period of time. As noted, harbor seals and Steller sea lions can exhibit a behavioral response (*e.g.*, including alert behavior, movement, vocalizing, or flushing) to visual stimuli. NMFS does not consider the lesser reactions (*e.g.*, alert behavior such as raising a head) to constitute harassment. Table 3 displays NMFS's three-point scale that categorizes pinniped disturbance reactions by severity. Observed behavior falling within categories two and three would be considered level B harassment. GLBA NP is able to record these behaviors for all observed pinnipeds. Because of the nature of their survey, SWAN researchers will only be able to record the total number of observed pinnipeds, and those which show an easily observable level 3 response (flushing). With these numbers and previous monitoring information from GLBA NP, NPS and NMFS should be able to estimate the total number of takes by Level B harassment resulting from SWAN monitoring.

Table 3. Three-Point Scale (Seal response to 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. Alerts would be recorded, but not counted as a 'take'.
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. These movements would be recorded and counted as a 'take'.
3	Flush	All retreats (flushes) to the water. Flushing into the water would be recorded and counted as a 'take'.

Upon the occurrence of low-severity disturbance (*i.e.*, the approach of a vessel or person as opposed to an explosion or sonic boom), pinnipeds typically exhibit a continuum of responses,

beginning with alert movements (*e.g.*, raising the head), which may then escalate to movement away from the stimulus and possible flushing into the water. Flushed pinnipeds typically re-occupy the same haulout within minutes to hours of a stimulus (Allen *et al.*, 1984 (Johnson and Acevedo-Gutierrez, 2007). As a result, a minimal number of animals may be taken more than once during the proposed survey activities so the number of takes likely represents exposures. In the case of GLBA NP, because there will be no more than five annual visits to three gull study sites and no more than eight annual visits to one other survey site, it is expected that individual harbor seals at Boulder Island, Flapjack Island, and Geike Rock will be disturbed no more than five times per year and no more than eight times per year on Lone Island. For SWAN's activities, KATM, KEFJ, and KBAY are each visited during the summer. There is a winter survey conducted each year at either KATM or KEFJ. Therefore individual harbor seals and Stellar sea lions at these locations will be disturbed no more than two times per year.

Numerous studies have shown that human activity can flush pinnipeds off haulout sites and beaches (Kenyon, 1972; Allen *et al.*, 1984; Calambokidis *et al.*, 1991; Suryan and Harvey, 1999; and Mortenson *et al.*, 2000, Mathews, 2000). In 1997, Henry and Hammill (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 Métis 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 seals flight reactions could be linked to a surprise factor by kayaks-canoes, which approach slowly, quietly and low on 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 has only a temporary effect on the haul out behavior of harbor seals in the Métis Bay area.

In 2004, Johnson and Acevedo-Gutierrez (2007) evaluated the efficacy of buffer zones for watercraft around harbor seal haulout sites on Yellow Island, Washington State. The authors estimated the minimum distance between the vessels and the haulout 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, which 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 haulout 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). Specific reactions from past NPS gull monitoring surveys are detailed in this proposed rule's Estimated Take Section.

Vessel Strike

Glacier Bay

The probability of vessel and marine mammal interactions (*i.e.*, motorboat strike) occurring during the proposed research activities is unlikely due to the motorboat's slow operational speed, which is typically 2 to 3 kn (2.3 to 3.4 mph) and the researchers continually scanning the water for marine mammals presence during transit to the islands. Thus, NMFS does not anticipate that strikes or collisions would result from the movement of the motorboat.

SWAN

SWAN's survey vessels move at higher speeds, 8 to 12 kn, than those used in the proposed GLBA NP activities, but vessel and marine mammal interactions are still unlikely because the on board researchers are constantly scanning the water for marine mammal presence. For SWAN's activities, NMFS does not anticipate any strikes or collisions between vessels and marine mammals.

Harbor Seal Pupping

Glacier Bay

During the harbor seal breeding (May-June) and molting (August) periods, ~66 percent of seals in Glacier Bay inhabit the primary glacial ice site and ~22 percent of seals are found in and adjacent to a group of islands in the southeast portion of Glacier Bay. At the proposed GLBA NP study sites, in 2016 only one pup was observed and no pups were observed during project activities in 2017 and 2015. Pups have been observed during NPS aerial surveys during the pupping seasons (conducted during low tide), but in few numbers (see Table 4). NMFS does not anticipate that the proposed activities would result in separation of mothers and pups as pups are rarely seen at the study sites.

Table 4. Average and maximum counts of hauled out harbor seal pups at glaucous-winged gull study sites during harbor seal monitoring aerial surveys from 2007-2016 (Womble unpublished data).

Site	Average of Pup Count	Std Dev of Pup Count[1]	Max of Pup Count
Boulder Island	0.8	1.3	5
Flapjack Island	14.9	11.5	43
Geikie Rock	0.1	0.4	2
Lone Island	0.8	0.9	4
Total	**4.74**	**9**	**43**

[1]A quantity calculated to indicate the extent of deviation for a group of pups as a whole.

SWAN

Based on aerial surveys between 2003 and 2005, the upper portions of KBAY had high harbor seal pup abundance during the peak pupping season (June) (Boveng at al, 2011). Proposed KBAY survey transects occur in this area of high abundance (See Figure 5 in LOA application). Boveng et al (2011) found that within Cook Inlet, June harbor seal pup abundance in an individual survey unit correlated positively with June adult abundance in that unit. Therefore, based on the anticipated presence of adult harbor seals, there are also likely pups present at sites in KATM and KEFJ during the pupping season (June). Despite the presence of pups, SWAN's research and monitoring activities are expected to result in minimal disturbance to the hauled out harbor seals of all life stages due to the distance and duration of the vessel's presence (see Proposed Mitigation), and NMFS does not anticipate that the proposed activities would result in separation of mothers and pups.

Steller sea lion pupping

SWAN

During the Steller sea lion pupping season (May – July), mothers spend time both on land with their pups and at sea foraging. Because SWAN's proposed surveys avoid transects that pass

Steller sea lion rookeries, NMFS does not anticipate any impacts on hauled out Steller sea lion mothers and their pups.

Summary

Based on studies described here and previous monitoring reports from GLBA NP (Discussed further in the Estimated Take Section), we anticipate that any pinnipeds found in the vicinity of the proposed projects in both GLBA NP and the SWAN region could have short-term behavioral reactions (*i.e.*, may result in marine mammals avoiding certain areas) due to noise and visual disturbance generated by: (1) motorboat approaches and departures and (2) human presence during research and monitoring activities. We would expect the pinnipeds to return to a haulout site within minutes to hours of the stimulus based on previous research (Allen *et al.*, 1984). Pinnipeds may be temporarily displaced from their haulout sites, but we do not expect that the pinnipeds would permanently abandon a haulout site during the conduct of the proposed research as activities are short in duration (brief transit through an area to up to two hours), and previous surveys have demonstrated that pinnipeds have returned to their haulout sites and have not permanently abandoned the sites.

NMFS does not anticipate that the proposed activities would result in the injury, serious injury, or mortality of pinnipeds. NMFS does not anticipate that vessel strikes would result from the movement of the motorboat. The proposed activities will not result in any permanent impact on habitats used by marine mammals, including prey species and foraging habitat.

Marine Mammal Habitat

NMFS does not anticipate that the proposed operations in GLBA NP or the SWAN region would result in any effects on the habitats used by the marine mammals in the proposed area, including the food sources they use (*i.e.*, fish and invertebrates). The main impact

associated with the proposed activity will be temporarily elevated noise levels from motorboats and human disturbance on marine mammals potentially leading to temporary displacement from a site, previously discussed in this proposed rule. NPS' LEIS for gull monitoring surveys in GLBA NP concluded that the activities do not result in the loss or modification to marine mammal habitat (NPS 2010). Additionally, any minor habitat alterations stemming from the maintenance of NPS' weather station will be located in an area that will not impact marine mammals. SWAN's activities in KATM and KEFJ do occur in Steller sea lion critical habitat, but will have minimal impact due to the nature of the disturbance and explicit avoidance of the most sensitive areas (rookeries). In all, the proposed activities in both GLBA NP and the SWAN region will not result in any permanent impact on habitats used by marine mammals, including prey species and foraging habitat.

Estimated Take

This section provides an estimate of the number of incidental takes proposed for authorization through this IHA, which will inform both NMFS's consideration of whether the number of takes is "small" 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 motorboats and the presence of NPS personnel. Based on the nature of the activity and proposed mitigation measures, 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.

Glacier Bay

In GLBA NP, harbor seals may be disturbed when vessels approach or researchers go ashore for the purpose of monitoring gull colonies and for the maintenance of the Lone Island weather tower. Harbor seals tend to haul out in small numbers at study sites. Using monitoring report data from 2015 to 2017 (see raw data from Tables 1 of the 2017, 2016 and 2015 Monitoring Reports, which are available online at: https://www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-research-and-other-activities), the average number of harbor seals per survey visit was calculated to estimate the approximate number of seals observers would find on any given survey day. As a result, the following averages were determined for each island: Boulder Island – average 3.45 seals, Flapjack Island – average 10.10 seals, Geikie Rock – average 9.58 seals, and Lone Island average of 18.91 seals (See Table 5). Estimated take for gull and climate monitoring was calculated by multiplying the average number of seals observed during past gull monitoring surveys (2015-2017) by the number of total site visits. This includes five annual visits to Boulder Island, Flapjack Island, and Geikie Rock and eight annual visits to Lone Island (to include three site visits for climate monitoring activities). Therefore, the total estimated

annual incidents of harassment equals 267 which totals to 1,335 takes during the entire five years of the proposed activities (See Table 5).

During climate monitoring, which is expected to take place from March to April and October to February, seal numbers are expected to dramatically decline within the action area. Although harbor seal survey data within GLBA NP is lacking for the months of October through February, results from satellite telemetry studies suggest that harbor seals travel extensively beyond the boundaries of GLBA NP during the post-breeding season (September-April) (Womble and Gende, 2013b). Therefore, using the latest observation data from past gull monitoring activities (that occurred from May to September) is applicable when estimating take for climate monitoring activities, as it will provide the most conservative estimates.

Table 5. Proposed takes by Level B harassment during NPS gull and climate monitoring surveys.

Site proposed for survey	Average number of seals observed Per Visit[1]	Number of proposed site visits	Proposed Level B harassment[1]	Percentage of Population[3]
Boulder Island	3.45 seals	5	17.27	0.24
Flapjack Island	10.10 seals	5	50.50	0.70
Geikie Rock	9.58 seals	5	47.92	0.66
Lone Island	18.91 seals	8[2]	151.27	2.10
Annual Total			**267**	**3.70**

[1]Data from 2015-2017 NPS gull surveys (NPS 2015b; NPS 2016; NPS 2017).
[2]Number includes three additional days for climate monitoring activities.
[3]Based on the percentage of the Glacier Bay/Icy Strait stock of harbor seals that are proposed to be taken by Level B harassment during the NPS's proposed gull and climate monitoring activities.

SWAN

Harbor seals and Steller sea lions may be disturbed by vessel presence, movement, or noise during the execution of SWAN's survey transects. The estimated number of takes by Level B harassment included in Table 6 are based on numbers of pinnipeds observed from a

[1]See Table 3 for NMFS' three-point scale that categorizes pinniped disturbance reactions by severity. NMFS only considers responses falling into Levels 2 and 3 as harassment (Level B Take) under the MMPA.

similar survey of KATM and KEFJ in 2013. In this survey, researchers observed an estimated 100 harbor seals and 100 Steller sea lions during each of the KATM and KEFJ surveys. Data from 2013 surveys were used to estimate take because in 2013, most of the transects were able to be completed. Thus, 2013 data offers the most conservative count-based estimate. Based on pinnipeds observed in 2013, NPS estimates that each year, across the three survey sites, SWAN's activities will result in take by Level B harassment of 300 harbor seals and 200 Steller sea lions. The observed number of harbor seals has been increased by 100 to account for the previously not surveyed KBAY, resulting in an estimated 1500 harbor seal and 1000 Steller sea lion takes by Level B harassment across the five years. For harbor seals, NPS estimates that 100 individuals will experience take by Level B harassment in each survey area each year. Annually, that would mean 200 harbor seal takes by Level B harassment in the Cook Inlet/Shelikof Strait stock (1000 over 5 years), and 100 harbor seal takes by Level B harassment from the Prince William Sound stock (500 over 5 years). For Steller sea lion takes by Level B harassment, NPS estimates that 100 individuals will experience take by Level B harassment each year in KATM and KEFJ. However, no takes by Level B harassment will occur in KBAY because Steller sea lions are not common in KBAY. For simplicity, NMFS assumes and analyzes the impacts of the full Steller sea lion take on both the eastern and western stocks. Because these estimates are based on observations of pinnipeds and not harassments, NMFS considers the estimated numbers of take by Level B harassment presented in Table 6 conservative.

Table 6. Proposed takes by Level B harassment due to SWAN's research and monitoring activities.

Species	Stock	Proposed Level B Take (annual)	Total Level B Takes in 5 Years	Percentage of Population over 1 year[1]

Harbor seal	Cook Inlet /Shelikof Strait	200	1000	0.7%
	Prince William Sound	100	500	0.3%
Steller sea lion	Western	200[2]	1000[2]	0.4%[2]
	Eastern	200[2]	1000[2]	0.5%[2]

[1]Based on the population size of each relevant stock as presented in Table 1.
[2]NMFS is only proposing to authorize 200 annual (1000 over 5 years) takes by Level B harassment for Steller sea lions, but is analyzing this take as fully coming from each of the U.S. Steller sea lion stocks.

Effects of Specified Activities on Subsistence Uses of Marine Mammals

The availability of the affected marine mammal stocks or species for subsistence uses may be impacted by this activity, though this is not an anticipated outcome. The subsistence uses that may be affected and the potential impacts of the activity on those uses are described below. Measures included in these proposed regulations to reduce the impacts of the activity on subsistence uses are identical to those which minimize disturbance of pinnipeds as described in the *Proposed Mitigation* section. Last, the information from this section and the *Proposed Mitigation* section is analyzed to determine whether the necessary findings may be made in the *Unmitigable Adverse Impact Analysis and Determination* section.

Subsistence harvest of pinnipeds is prohibited in GLBA NP, KATM, and KEFJ but it does occur in nearby areas outside park boundaries. Native communities near KBAY, including Homer, Seldovia, Nanwalek, and Port Graham harvested an estimated 32 harbor seals and 3 Steller sea lions in 2007 (Wolfe *et al.* 2009). It is not known exactly where these pinnipeds were harvested but some of them could potentially have been harvested in KBAY. 2007 harvest of both Steller sea lions and harbor seals was at a low point in June and July when SWAN's surveys would occur in KBAY. Additionally, the disturbance to pinnipeds caused by NPS's activities is

limited to non-lethal take by Level B harassment and is temporary and short in duration. Because the subsistence harvest is separated in time and space from NPS's proposed activities, and the disturbance should not result in anything other than short term (minutes to hours) avoidance of haulouts, there should be no impacts on subsistence harvest.

Proposed Mitigation

In order to issue an incidental take authorization (ITA) under section 101(a)(5)(A) 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, and on the availability of such species or stock for taking" for certain subsistence uses. NMFS regulations require applicants for ITAs 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 on 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 of implementing as planned); 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.

Glacier Bay

NPS has based the mitigation measures which they propose to implement during the proposed research, on the following: (1) protocols used during previous gull research activities as required by our previous authorizations for these activities; and (2) recommended best practices in Womble *et al.* (2013a); Richardson *et al.* (1995); and Weir and Dolman (2007).

To reduce the potential for disturbance from acoustic and visual stimuli associated with gull and climate monitoring activities within GBLA NP, NPS has proposed to implement the following mitigation measures for marine mammals:

Pre-Survey Monitoring

Before all surveys, the lead NPS biologist will instruct additional survey crew on appropriate conduct when in the vicinity of hauled-out marine mammals. This training shall brief survey personnel on marine mammals (inclusive of identification as needed, *e.g.*, neonates). Prior to deciding to land onshore to conduct gull and climate monitoring, the researchers would use high-powered image stabilizing binoculars from the watercraft to document the number, species, and location of hauled-out marine mammals at each island. The vessels would maintain a distance of 328 to 1,640 ft (100 to 500 m) from the shoreline to allow the researchers to conduct pre-survey monitoring. If offshore predators, harbor seal pups of less than one week of age (*i.e.*, neonates), or Steller sea lions are observed, researchers will follow the protocols for site

avoidance discussed below. If neither of these instances occur, researchers will then perform a controlled landing on the survey site.

Site Avoidance

If a harbor seal pup less than one week old (*i.e,*. neonates) or a harbor seal predator (*i.e.*, killer whale) is observed near or within the action area, researchers will not go ashore to conduct gull or climate monitoring activities. Also, if Steller sea lions are observed within or near the study site, researchers will maintain a distance of at least 100 m from the animals at all times.

Controlled Landings

The researchers would determine whether to approach an island study site based on type of animals present. Researchers would approach the island by motorboat at a speed of approximately 2 to 3 kn (2.3 to 3.4 mph). This would provide enough time for any marine mammals present to slowly enter the water without panic (flushing). The researchers would also select a pathway of approach farthest from the hauled-out harbor seals to minimize disturbance.

Minimize Predator Interactions

During pre-survey monitoring on approach to a site, NPS will observe the surrounding area for predators. If the researchers visually observe marine predators (*i.e.*, killer whales) present within a one mile radius of hauled-out marine mammals, the researchers would not approach the study site.

Disturbance Reduction Protocols

While onshore at study sites, the researchers would remain vigilant for hauled-out marine mammals. If marine mammals are present, the researchers would move slowly and use quiet voices to minimize disturbance to the animals present.

Whale avoidance

Although humpback whales and killer whales are not expected to be impacted by the proposed activities at GLBA NP, avoidance measures will be taken if humpback whales or killer whales are observed. Based on regulations (81 FR 62018; September 8, 2016), NPS will avoid operation of a motor vessel within 1/4 nautical mile of a whale. If accidentally positioned within 1/4 nautical mile of a whale, researchers will slow the vessel speed to 10 knots or less and maintain course away from the whale until at least 1/4 nautical mile of separation exists.

SWAN

NPS has based the mitigation measures which they propose to implement at SWAN on the following: (1) protocols used during previous authorizations for similar GLBA NP research; (2) recommended best practices in Womble *et al.* (2013a); Richardson *et al.* (1995); and Weir and Dolman (2007); and (3) experience of SWAN researchers in previous surveys.

To reduce the potential for disturbance from acoustic and visual stimuli associated with SWAN's surveys, NPS has proposed to implement the following mitigation measures for marine mammals:

Disturbance Reduction Protocols

While surveying study sites, the researchers will maintain a vessel distance of 100 to 150 m from shorelines at all times. If hauled out Steller sea lions and harbor seals are observed, the survey would maintain speed and minimum distance from the haulout to avoid startling. Additionally the survey will be attempted from a distance greater than 150 m, if conditions allow proper execution of the survey at that distance.

Rookery Avoidance

SWAN will avoid transects that pass known Steller sea lion rookery beaches in order to minimize disturbance of these rookeries and the surrounding critical habitat.

Whale avoidance

Although humpback and beluga whales are not expected to be impacted by SWAN's proposed work, avoidance measures will be taken if these species are observed. Based on regulations (81 FR 62018; September 8, 2016), SWAN will avoid operation of a motor vessel within 1/4 mile of a whale. If accidentally positioned within 1/4 nautical mile of a whale, researchers will slow the vessel speed to 10 knots or less and maintain course away from the whale until at least 1/4 nautical mile of separation exists.

Mitigation Conclusions

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 of effecting the least practicable impact on marine mammal species or stocks and their habitat, paying particular attention to rookeries, mating grounds, areas of similar significance, and on the availability of such species or stock for subsistence uses.

Proposed Monitoring and Reporting

In order to issue an ITA 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); and
- Mitigation and monitoring effectiveness.

SWAN

NPS proposes to conduct marine mammal monitoring during the SWAN activities, in order to implement the mitigation measures that require real-time monitoring and to gain a better understanding of marine mammals and their impacts to the project's activities. Because the activity is a survey of marine birds and mammals in the area, researchers will naturally be monitoring the area for pinnipeds or other marine mammals during all activities. Monitoring

activities will consist of conducting and recording observations of pinnipeds within the vicinity of the proposed research areas. The monitoring notes would provide dates, transect location, species, numbers of animals present within the transect, and numbers of pinnipeds that flushed into the water.

The method for recording disturbances follows those in Mortenson (1996). For NPS' activities in the SWAN region, pinniped disturbances would be based on a three-point scale that represents an increasing response to the disturbance (Table 3). Because SWAN surveys are conducted at speed, researchers will be able to record the total number of each pinniped species observed and the number of Level 3 (Flushing) responses that occur, but not other, less noticeable disturbance responses.

SWAN does not have previous monitoring aimed specifically at recording and quantifying marine mammal disturbance. Similarity between the GLBA NP and SWAN proposed activities for this proposed rule suggest mitigation measures based on relevant portions of previous GLBA NP authorizations will provide the means of effecting the least practicable impact on the species or stock in the SWAN activity.

GLBA NP

NPS proposes to conduct marine mammal monitoring during the present GLBA NP project, in order to implement the mitigation measures that require real-time monitoring and to gain a better understanding of marine mammals and their impacts to the project's activities. In addition, NPS's monitoring plan is guiding additional monitoring effort designed to answer questions of interest regarding pinniped usage of GLBA NP haulouts and the effects of NPS's activity on these local populations. The researchers will monitor the area for pinnipeds during all research activities. Monitoring activities will consist of conducting and recording observations of

pinnipeds within the vicinity of the proposed research areas. The monitoring notes would provide dates, location, species, the researcher's activity, behavioral state, numbers of animals that were alert or moved greater than one meter, and numbers of pinnipeds that flushed into the water.

The method for recording disturbances follows those in Mortenson (1996). NPS activities in GLBA NP would record pinniped disturbances on a three-point scale that represents an increasing response to the disturbance (Table 3). Both a level 2 and level 3 response would be recorded as a take by Level B harassment. NPS will record the time, source, and duration of the disturbance, as well as an estimated distance between the source and haulout.

Previous Monitoring Results

NPS has complied with the monitoring requirements under the previous GLBA NP authorizations. NMFS posted the 2017 report on our website at *https://www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-research-and-other-activities* and the results from the previous NPS monitoring reports support our findings that the mitigation measures required under the 2014 - 2017 Authorizations provide the means of effecting the least practicable impact on the species or stock in the GLBA NP activity. During the last 3 years of GLBA NP activity, approximately a third of all observed harbor seals have flushed in response to these activities (37 percent in 2015, 37 percent in 2016, and 38 percent in 2017). The following narratives provide a detailed account of each of the past 3 years of monitoring for the GLBA NP activity (Summarized in Table 7):

In 2017, of the 86 harbor seals that were observed: 33 flushed in to the water, 0 became alert but did not move >1 m, and 0 moved >1 m but did not flush into the water. In all, no harbor seal pups were observed. On two occasions, harbor seals were flushed into the water when islands were accessed for gull surveys. In these instances, the vessel approached the island at a

very slow speed and most of the harbor seals flushed into the water at approximately 150 - 185 m. On two events, harbor seals were observed hauled out on Boulder Island and not disturbed due to their distance from the survey area. In addition, during two pre-monitoring surveys conducted for Lone Island, harbor seals were observed hauled out and the survey was not conducted to prevent disturbance of harbor seals.

In 2016, of the 216 harbor seals that were observed: 77 flushed in to the water; 3 became alert but did not move >1 m, and 17 moved >1 m but did not flush into the water. On five occasions, harbor seals were flushed into the water when islands were accessed for gull surveys. In these instances, the vessel approached the island at a very slow speed and most of the harbor seals flushed into the water at approximately 50-100 m. In four instances, fewer than 25 harbor seals were present, but in one instance, 41 harbor seals were observed flushing into the water when NPS first saw them as they rounded a point of land in kayaks accessing Flapjack Island. In five instances, harbor seals were observed hauled out and not disturbed due to their distance from the survey areas.

In 2015, of the 156 harbor seals that were observed: 57 flushed in to the water; 25 became alert but did not move >1 m, and 0 moved >1 m but did not flush into the water. No pups were observed. On 2 occasions, harbor seals were observed at the study sites in numbers <25 and the islands were accessed for gull surveys. In these instances, the vessel approached the island at very slow speed and most of the harbor seals flushed into water at approximately 200 m (Geikie 8/5/15) and 280 m (Lone, 8/5/15). In one instance, (Lone, 6/11/15) NPS counted 20 harbor seals hauled out during the initial vessel-based monitoring, but once on the island, NPS observed 33 hauled out seals. When NPS realized the number of seals present, they ceased the survey and left the area, flushing 13 seals into the water.

Table 7. Summary Table of 2015-2017 Monitoring Reports for NPS Gull Studies.

Monitoring Year	Number of Adults Observed	Number of Pups Observed	Flushed into water	Moved >1 m but did not flush	Alert but did not move >1 m	Level B Take Authorized for Activity	Level B Take Recorded During Activities
2017	**86**	**0**	**33**	**0**	**0**	**218**	**33**
2016	**216**	**1**	**77**	**3**	**17**	**500**	**80**
2015	**156**	**0**	**57**	**0**	**25**	**500**	**57**

Coordination

NPS can add to the knowledge of pinnipeds in the proposed action area 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.

Glacier Bay

NPS actively monitors harbor seals at breeding and molting haulout locations to assess trends over time (*e.g.*, Mathews & Pendleton, 2006; Womble *et al.* 2010, Womble and Gende, 2013b). NPS's monitoring plan is guiding additional monitoring effort designed to answer questions of interest regarding pinniped usage of GLBA NP haulouts and the effects of NPS's activity on these local populations. This monitoring program involves collaborations with biologists from the Alaska Department of Fish and Game, and the NMFS Alaska Fisheries Science Center. NPS will continue these collaborations and encourage continued or renewed monitoring of marine mammal species. NPS will coordinate with state and Federal marine mammal biologists to determine what additional data or observations may be useful for monitoring marine mammals and haulouts in GLBA NP. Additionally, NPS would report vessel-

based counts of marine mammals, branded, or injured animals, and all observed disturbances to the appropriate state and Federal agencies.

SWAN

NPS is establishing a monitoring program for pinnipeds in the SWAN region through its marine bird and marine mammal surveys. NPS will also coordinate with state and Federal marine mammal biologists to determine what additional data or observations may be useful for monitoring marine mammals and haul outs in the SWAN survey areas.

SWAN has been conducting nearshore coastal surveys along the KATM and KEFJ since 2006 and 2007, respectively (Coletti et al, 2018). SWAN collaborates closely with U.S. Geological Survey, U.S. Fish and Wildlife Service, the University of Alaska Fairbanks and others under the Gulf Watch Alaska (*https://www.gulfwatchalaska.org/*) program, primarily funded by the Exxon Valdez Oil Spill Trustee Council. SWAN will continue these collaborations and encourage continued or renewed monitoring of marine mammal species. Additionally, NPS will report vessel-based counts of marine mammals, branded or injured animals, and all observed disturbances to state and Federal agencies.

Reporting

SWAN and GLBA NP are each required to submit separate draft annual reports on all activities and marine mammal monitoring results to NMFS within ninety days following the end of its monitoring period. These reports will include a summary of the information gathered pursuant to the monitoring requirements set forth in the Authorization. SWAN and GLBA NP will submit final reports to NMFS within 30 days after receiving comments on the draft report. If SWAN or GLBA NP receive no comments from NMFS on the report, NMFS will consider the draft report to be the final report. NPS will also submit a comprehensive 5-year report covering

all activities conducted under the incidental take regulations 90 days following expiration of these regulations or, if new regulations are sought, no later than 90 days prior to expiration of the regulations.

Each report will describe the operations conducted and sightings of marine mammals near the proposed project. The report will provide full documentation of methods, results, and interpretation pertaining to all monitoring. The report will provide:

1. A summary and table of the dates, times, and weather during all research activities;

2. Species, number, location, and behavior of any marine mammals observed throughout all monitoring activities;

3. An estimate of the number (by species) of marine mammals exposed to acoustic or visual stimuli associated with the research activities; and

4. A description of the implementation and effectiveness of the monitoring and mitigation measures of the Authorization and full documentation of methods, results, and interpretation pertaining to all monitoring.

In the unanticipated event that the specified activity clearly causes the take of a marine mammal in a manner prohibited by the authorization, such as an injury (Level A harassment), serious injury, or mortality (*e.g.*, vessel-strike, stampede, etc.), NPS shall immediately cease the specified activities and immediately report the incident to the Office of Protected Resources, NMFS and the Alaska Regional Stranding Coordinator. The report must include the following information:

- Time, date, and location (latitude/longitude) of the incident;
- Description and location of the incident (including tide level if applicable);
- Environmental conditions (*e.g.*, wind speed and direction, Beaufort sea state,

cloud cover, and visibility);

- Description of all marine mammal observations in the 24 hours preceding the incident;
- Species identification or description of the animal(s) involved;
- Fate of the animal(s); and
- Photographs or video footage of the animal(s) (if equipment is available).

NPS shall not resume its activities until NMFS is able to review the circumstances of the prohibited take. NMFS will work with NPS to determine what is necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. NPS may not resume their activities until notified by us via letter, email, or telephone.

In the event that NPS discovers an injured or dead marine mammal, and the lead researcher determines that the cause of the injury or death is unknown and the death is relatively recent (*i.e.*, in less than a moderate state of decomposition as we describe in the next paragraph), NPS will immediately report the incident to the Office of Protected Resources, NMFS and the Alaska Regional Stranding Coordinator. The report must include the same information identified in the paragraph above. Activities may continue while we review the circumstances of the incident. We will work with NPS to determine whether modifications in the activities are appropriate.

In the event that NPS discovers an injured or dead marine mammal, and the lead visual observer determines that the injury or death is not associated with or related to the authorized activities (*e.g.*, previously wounded animal, carcass with moderate to advanced decomposition, or scavenger damage), NPS will report the incident to the incident to the Office of Protected Resources, NMFS and the Alaska Regional Stranding Coordinator within 24 hours of the

discovery. NPS researchers will provide photographs or video footage (if available) or other documentation of the stranded animal sighting to us. NPS can continue their research activities.

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).

During these activities, harbor seals and Steller sea lions may exhibit behavioral modifications, including temporarily vacating the area during the proposed research and monitoring activities to avoid human and vessel disturbance. However, due to the project's minimal levels of visual and acoustic disturbance (Level B harassment only), NMFS does not

expect NPS's specified activities to cause long-term behavioral disturbance, abandonment of the haulout area, injury, serious injury, or mortality. In addition, while a portion of these proposed activities would take place in areas of significance for marine mammal feeding, resting, breeding, or pupping, there would be no adverse impacts on marine mammal habitat as discussed above. Due to the nature, degree, and context of the behavioral harassment anticipated, we do not expect the activities to impact annual rates of recruitment or survival.

NMFS does not expect pinnipeds to permanently abandon any area surveyed by NPS researchers, as is evidenced by continued presence of pinnipeds at the GLBA NP sites during annual gull and climate monitoring. NMFS anticipates that impacts to hauled-out harbor seals and Steller sea lions during NPS' research and monitoring activities would be behavioral harassment of limited duration (*i.e.*, up to two hours per site visit) and limited intensity (*i.e.*, temporary flushing at most).

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;
- The takes from Level B harassment would be due to potential behavioral disturbance;
- The effects of the research activities would be limited to short-term startle responses and localized behavioral changes due to the short and sporadic duration of the research activities;
- The proposed activities would partially take place in areas of significance for marine mammal feeding, resting, breeding, or pupping but due to their nature and duration would not adversely impact marine mammal habitat or deny pinnipeds access to this

habitat because of the large availability of alternate haulouts and short-duration of disturbance;

- Anecdotal observations and results from previous monitoring reports show that the pinnipeds returned to the various sites and did not permanently abandon haulout sites after NPS conducted their research activities; and
- Harbor seals and Steller sea lions may flush into the water despite researchers best efforts to keep calm and quiet around these pinnipeds; however, injury or mortality has never been documented and is not anticipated from flushing events. GLBA NP researchers would approach study sites slowly to provide enough time for any marine mammals present to slowly enter the water without panic. SWAN researchers would attempt to conduct their surveys at a distance which would not result in pinniped disturbance.

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 Analysis

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, where estimated numbers are available, NMFS compares the number of individuals proposed to be 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.

As mentioned previously, NMFS estimates that NPS' research activities, including gull monitoring, climate monitoring, and marine animal surveys, could potentially affect, by Level B harassment only, two species of marine mammal under our jurisdiction. For harbor seals, this annual take estimate is small relative to the three impacted stocks, ranging from 0.3 to 3.7 percent (See Table 1, Table 5, and Table 6). For Steller sea lions, this annual take estimate is small (200 sea lions) relative to the western stock (0.4 percent) or eastern stock (0.5 percent). In addition to this, there is a high probability in the GLBA NP activities that repetitive takes of the same animal may occur which reduces the percentage of population impacted even further.

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.

Impact on Availability of Affected Species for Taking for Subsistence Uses

There are no relevant subsistence uses of marine mammals implicated by the specified activities in GLBA NP, KATM, or KEFJ. Subsistence harvest is prohibited in these national parks and the nature of the activities means they should not affect any harvest occurring in nearby waters. There is possible pinniped harvest in KBAY, but the timing of the survey is removed from the peak seasons of harvest. Additionally, the disturbance to pinnipeds caused by NPS's activities is limited to non-lethal take by Level B harassment and is temporary and short in duration. Therefore, we have 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. To ensure ESA compliance for the issuance of incidental take regulations and subsequent LOAs, NMFS consults internally, in this case with the Alaska Regional Office, whenever we propose to authorize take for endangered or threatened species.

NMFS is proposing to authorize take of western DPS Steller sea lions, which are listed under the ESA.

NMFS's Office of Protected Resources has requested initiation of Section 7 consultation with NMFS's Alaska Regional Office for the issuance of this LOA. NMFS will conclude the ESA consultation prior to reaching a determination regarding the proposed issuance of the authorization.

Adaptive Management

The regulations governing the take of marine mammals incidental to NPS research and monitoring activities in GLBA NP and SWAN region would contain an adaptive management component.

The reporting requirements associated with this proposed rule are designed to provide NMFS with monitoring data from the previous year to allow consideration of whether any changes are appropriate. The use of adaptive management allows NMFS to consider new

information from different sources to determine (with input from NPS regarding practicability) on an annual or biennial basis if mitigation or monitoring measures should be modified (including additions or deletions). Mitigation measures could be modified if new data suggests that such modifications would have a reasonable likelihood of reducing adverse effects to marine mammals and if the measures are practicable.

NPS's monitoring program (see "Proposed Monitoring and Reporting") would be managed adaptively. Changes to the proposed monitoring program may be adopted if they are reasonably likely to better accomplish the MMPA monitoring goals described previously or may better answer the specific questions associated with NPS's monitoring plan.

The following are some of the possible sources of applicable data to be considered through the adaptive management process: (1) results from monitoring reports, as required by MMPA authorizations; (2) results from general marine mammal and sound research; and (3) any information which reveals that marine mammals may have been taken in a manner, extent, or number not authorized by these regulations or subsequent LOAs.

Request for Information

NMFS requests interested persons to submit comments, information, and suggestions concerning NPS's request and the proposed regulations (see **ADDRESSES**). All comments will be reviewed and evaluated as we prepare the final rule and make final determinations on whether to issue the requested authorizations. 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. NPS is the sole entity that would be subject to the requirements in these proposed regulations, and the NPS 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.

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 Paperwork Reduction Act (PRA) unless that collection of information displays a currently valid OMB control number. However, this proposed rule does not contain a collection-of-information requirement subject to the provisions of the Paperwork Reduction Act (PRA) because the applicant is a Federal agency, and the information is not "uses for general statistical purposes". 44 U.S.C. 3502(3)(A).

List of Subjects in 50 CFR Part 217

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

Dated: December 4, 2018.

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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 TAKING AND IMPORTING OF MARINE MAMMALS

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

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

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

Subpart C – Taking Marine Mammals Incidental to Research and Monitoring in Southern Alaska National Parks

Sec.

§ 217.20 Specified activity and specified geographical region.

(a) Regulations in this subpart apply only to the National Park Service (NPS) and those persons it authorizes or funds to conduct activities on its behalf for the taking of marine mammals that occurs in the area outlined in paragraph (b) of this section and that occurs

incidental to the NPS's research and monitoring activities listed in the Letter of Authorization (LOA)

(b) The taking of marine mammals by NPS may be authorized in an LOA only if it occurs at Glacier Bay National Park (GLBA NP) or in the NPS's Southwest Alaska Inventory and Monitoring Network (SWAN) sites.

§ 217.21 Effective dates.

Regulations in this subpart are effective from March 1, 2019 through February 29, 2024.

§ 217.22 Permissible methods of taking.

Under LOAs issued pursuant to §§ 216.106 of this chapter and 217.26, the Holder of the LOA (hereinafter "NPS") may incidentally, but not intentionally, take marine mammals within the area described in § 217.20(b) by Level B harassment associated with research and monitoring activities, provided the activity is in compliance with all terms, conditions, and requirements of the regulations in this subpart and the appropriate LOA.

§ 217.23 Prohibitions.

Notwithstanding takings contemplated in § 217.20 and authorized by an LOA issued under §§ 216.106 of this chapter and 217.26, no person in connection with the activities described in § 217.20 may:

(a) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or an LOA issued under §§ 216.106 of this chapter and 217.26;

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

(c) Take any marine mammal specified in such LOAs in any manner other than as specified;

(d) Take a marine mammal specified in such LOAs 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 LOAs 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.

§ 217.24 Mitigation requirements.

When conducting the activities identified in § 217.20(a), the mitigation measures contained in any LOA issued under § 216.106 of this chapter and § 217.24 must be implemented. These mitigation measures shall include but are not limited to:

(a) *General conditions*: (1) A copy of any issued LOA must be in the possession of NPS, its designees, and additional survey crew personnel operating under the authority of the issued LOA.

(2) Before all surveys, the lead NPS biologist must instruct additional survey crew on appropriate conduct when in the vicinity of hauled-out marine mammals. This training must brief survey personnel on marine mammals (inclusive of identification as needed, *e.g.*, neonates).

(3) If humpback whales, killer whales, or beluga whales are observed, NPS must avoid operation of a motor vessel within 1/4 nautical mile of a whale. If accidentally positioned within 1/4 nautical mile of a whale, NPS must slow the vessel speed to 10 knots or less and maintain course away from the whale until at least 1/4 nautical mile of separation exists.

(b) *Glacier Bay Gull and Climate Monitoring*. (1) On an annual basis, NPS may conduct a maximum of five days of gull monitoring for each survey location listed in the LOA.

(2) On an annual basis, the NPS may conduct a maximum of three days of activities related to climate monitoring on Lone Island.

(3) NPS is required to conduct pre-survey monitoring before deciding to access a study site.

(4) Prior to deciding to land onshore, NPS must use high-powered image stabilizing binoculars before approaching at distances of greater than 500 m (1,640 ft) to determine and document the number, species, and location of hauled-out marine mammals.

(5) During pre-survey monitoring, vessels must maintain a distance of 328 to 1,640 ft (100 to 500 m) from the shoreline.

(6) If a harbor seal pup less than one week of age (neonate) is present within or near a study site or a path to a study site, NPS must not access the site nor conduct the study at that time. In addition, if during the activity, a pup less than one week of age is observed, all research activities must conclude for the day.

(7) NPS must maintain a distance of at least 100 m from any Steller sea lion;

(8) NPS must perform controlled and slow ingress to islands where harbor seals are present.

(9) NPS must monitor for offshore predators at the study sites during pre-survey monitoring and must avoid research activities when killer whales (*Orcinus orca*) or other predators are observed within a 1 mile radius.

(10) NPS must maintain a quiet working atmosphere, avoid loud noises, and must use hushed voices in the presence of hauled-out pinnipeds.

(c) *SWAN Marine bird and mammal surveys*. (1) On an annual basis, NPS may conduct one summer survey at each location listed in the LOA.

(2) On an annual basis, the NPS may conduct one winter survey at each location listed in the LOA.

(3) NPS must maintain a minimum vessel distance of 100 meters from the shoreline at all times while surveying.

(4) If hauled out Steller sea lions or harbor seals are observed, NPS must maintain the vessel speed and minimum distance. If survey conditions allow, the survey will be attempted from a distance greater than 150 meters.

§ 217.25 Requirements for monitoring and reporting.

NPS is required to conduct marine mammal monitoring during research and monitoring activities. NPS and/or its designees must record the following for the designated monitoring activity:

(a) *Glacier Bay Gull and Climate Monitoring*. (1) Species counts (with numbers of adults/juveniles); and numbers of disturbances, by species and age, according to a three-point scale of intensity;

(2) Information on the weather, including the tidal state and horizontal visibility;

(3) The observer will note the presence of any offshore predators (date, time, number, and species); and

(4) The observer will note unusual behaviors, numbers, or distributions of pinnipeds, such that any potential follow-up research can be conducted by the appropriate personnel; marked or tag-bearing pinnipeds or carcasses, allowing transmittal of the information to appropriate agencies; and any rare or unusual species of marine mammal for agency follow-up. The observer will report that information to NMFS's Alaska Fisheries Science Center and/or the Alaska Department of Fish and Game Marine Mammal Program.

(b) *SWAN Marine Bird and Mammal Surveying*. (1) Species counts and numbers of type 3, flushing, disturbances;

(2) Information on the weather, including the tidal state and horizontal visibility; and

(3) The observer will note unusual behaviors, numbers, or distributions of pinnipeds, such that any potential follow-up research can be conducted by the appropriate personnel; marked or tag-bearing pinnipeds or carcasses, allowing transmittal of the information to appropriate agencies; and any rare or unusual species of marine mammal for agency follow-up. The observer will report that information to NMFS's Alaska Fisheries Science Center and/or the Alaska Department of Fish and Game Marine Mammal Program.

(c) NPS must submit separate annual draft reports for GLBA NP and SWAN on all monitoring conducted within ninety calendar days of the completion of annual research and monitoring activities. Final reports for both GLBA NP and SWAN must be prepared and submitted within thirty days following resolution of comments on each draft report from NMFS. This report must contain:

(1) A summary and table of the dates, times, and weather during all research activities;

(2) Species, number, location, and behavior of any marine mammals observed throughout all monitoring activities;

(3) An estimate of the number (by species) of marine mammals exposed to acoustic or visual stimuli associated with the research activities; and

(4) A description of the implementation and effectiveness of the monitoring and mitigation measures of the Authorization and full documentation of methods, results, and interpretation pertaining to all monitoring.

(d) NPS must submit a comprehensive 5-year report covering all activities conducted under the incidental take regulations at least 90 days prior to expiration of these regulations if new regulations are sought or 90 days after expiration of regulations.

(e) *Reporting of injured or dead marine mammals*. (1) In the unanticipated event that the activity defined in § 219.20(a) clearly causes the take of a marine mammal in a prohibited manner such as an injury (Level A harassment), serious injury, or mortality, NPS must immediately cease the specified activities and report the incident to the Office of Protected Resources, NMFS, and the Alaska 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 and active sound source use 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).

(2) Activities must not resume until NMFS is able to review the circumstances of the prohibited take. NMFS will work with NPS to determine what measures are necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. NPS must not resume their activities until notified by NMFS.

(3) In the event that NPS 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 moderate state of decomposition), NPS must immediately report the incident to the Office of Protected Resources, NMFS, and the Alaska Stranding Coordinator,

NMFS. The report must include the same information identified in § 217.25(e)(1). Activities may continue while NMFS reviews the circumstances of the incident. NMFS will work with NPS to determine whether additional mitigation measures or modifications to the activities are appropriate.

(4) In the event that NPS discovers an injured or dead marine mammal and determines that the injury or death is not associated with or related to the activities defined in § 217.20(a) (*e.g.*, previously wounded animal, carcass with moderate to advanced decomposition, scavenger damage), NPS must report the incident to OPR and the Alaska Stranding Coordinator, NMFS, within 24 hours of the discovery. NPS must provide photographs or video footage or other documentation of the stranded animal sighting to NMFS. NPS can continue their research activities.

(5) Pursuant to paragraphs § 217.25(e)(2) through (4), NPS may use discretion in determining what injuries (*i.e.*, nature and severity) are appropriate for reporting. At minimum, NPS must report those injuries considered to be serious (*i.e.*, will likely result in death) or that are likely caused by human interaction (*e.g.*, entanglement, gunshot). Also pursuant to paragraphs § 217.25(e)(3) and (4) of this section, NPS may use discretion in determining the appropriate vantage point for obtaining photographs of injured/dead marine mammals.

§ 217.26 Letters of Authorization.

(a) To incidentally take marine mammals pursuant to these regulations, NPS 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, NPS 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, NPS must apply for and obtain a modification of the LOA as described in § 217.27.

(e) The LOA shall set forth:

(1) Permissible methods 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 30 days of a determination.

§ 217.27 Renewals and modifications of Letters of Authorization.

(a) An LOA issued under §§ 216.106 of this chapter and 217.26 for the activity identified in § 217.20(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 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 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 217.26 for the activity identified in § 217.20(a) may be modified by NMFS under the following circumstances:

(1) Adaptive Management – NMFS may modify (including augment) the existing mitigation, monitoring, or reporting measures (after consulting with NPS 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 NPS's monitoring from the previous year(s).

(B) Results from other marine mammal 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 shall publish a notice of proposed LOA in the **Federal Register** and solicit public comment.

(2) Emergencies – If NMFS determines that an emergency exists that poses a significant

risk to the well-being of the species or stocks of marine mammals specified in LOAs issued pursuant to §§ 216.106 of this chapter and 217.26, 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.

§ 217.28 [Reserved]

§ 217.29 [Reserved]

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