UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
PROGRAM PLANNING AND INTEGRATION
Silver Spring, Maryland 20910

APR 19 2010

To All Interested Government Agencies and Public Groups:

Under the National Environmental Policy Act (NEPA), an environmental review has been performed on the following action.

TITLE: *Environmental Assessment for Issuance of an Incidental Harassment Authorization for Replacement and Repair of Northern Fur Seal Observation Towers and Walkways on St. Paul Island, Alaska, January, 2010*

LOCATION: Northern fur seal breeding and resting areas on St. Paul Island, Alaska (Pribilof Islands in the Bering Sea)

SUMMARY: The National Marine Fisheries Service (NMFS) proposes to issue an Incidental Harassment Authorization (IHA) to the NMFS Alaska Regional Office (NMFS AKR) for the take, by Level B harassment only, of marine mammals during construction (i.e., replacement and repair) operations of northern fur seal observation towers and walkways on St. Paul Island, Alaska, April to June and December, 2010. NMFS has determined that the impact of conducting the replacement and repair operations on St. Paul Island may result, at worst, in a temporary modification in behavior of small numbers of northern fur seals. No injury, serious injury, or mortality is anticipated to result from this activity, nor is it authorized. NMFS has further determined that this activity will result in a negligible impact on the affected species or stocks.

RESPONSIBLE OFFICIAL: James H. Lecky
Director
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National Marine Fisheries Service
National Oceanic and Atmospheric Administration
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The environmental review process led us to conclude that this action will not have a significant effect on the human environment. Therefore, an environmental impact statement will not be prepared. A copy of the finding of no significant impact (FONSI) including the supporting environmental assessment (EA), prepared by the NMFS AKR, is enclosed for your information. Although NOAA is not soliciting comments on this FONSI, we will consider any comments submitted that would assist us in preparing future NEPA documents. Please submit any written comments to the responsible official named above.

Sincerely,

for Paul N. Doremus, Ph.D.
NOAA NEPA Coordinator

Enclosure

Environmental Assessment
FOR
Issuance of an Incidental Harassment Authorization
for
Replacement and Repair of Northern Fur Seal Observation Towers and Walkways on St. Paul Island, Alaska.

January, 2010

Lead Agency: U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Office of Protected Resources

Responsible Official: James H. Lecky, Director, Office of Protected Resources

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Location: Northern fur seal breeding and resting areas on St. Paul Island, Alaska

Abstract: The National Marine Fisheries Service (NMFS) proposes to issue an Incidental Harassment Authorization (IHA) for takes of northern fur seals on St. Paul Island, Alaska, pursuant to the Marine Mammal Protection Act of 1972, as amended (MMPA, 16 U.S.C. 1361 *et seq*.). The authorization would be valid for one year from the date of issuance and would authorize the incidental taking of small numbers of northern fur seals during construction activities on St. Paul Island, Alaska.

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CHAPTER 1 PURPOSE OF AND NEED FOR ACTION

1.1 DESCRIPTION OF ACTION

The issuance of an IHA for “taking” northern fur seals by “Level B harassment” in the wild, pursuant to the Marine Mammal Protection Act of 1972, as amended (MMPA; 16 U.S.C. 1361 *et seq*.), and the regulations governing the taking and importing of marine mammals (50 CFR Part 216 and the Fur Seal Act of 1966 (16 U.S.C. 1151 *et seq*.).

1.1.1 Background

Northern fur seal populations on St. Paul Island have been declining for at least the past 10 years (Towell *et al*., 2006). Studies funded by NMFS, North Pacific Research Board, and North Pacific Universities Marine Mammal Consortium, and the Bering Sea Integrated Ecosystem Research Program of northern fur seals have increased in recent years to investigate this decline. Research observation towers and walkways used by scientists have degraded and no longer are able to safely support population assessment research activities or new research proposed to investigate changes in the northern fur seal population or their ecosystem.

1.1.2 Purpose and Need

Section 101(a)(5)(D) of the MMPA (16 U.S.C. 1361 *et seq*.) directs the Secretary of Commerce to allow, upon request, the incidental, but not intentional taking, by harassment, 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.

An Incidental Harassment Authorization (IHA) to take small numbers of marine mammals by harassment shall be granted if NMFS finds that the taking will have a negligible impact on the species or stock(s) and will not have an unmitigable adverse impact on the availability of the species or stock(s) for subsistence uses (where relevant), and the permissible methods of taking and requirements pertaining to the mitigation, monitoring, and reporting of such takings are set forth to achieve the least practicable adverse impact. 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."

Section 101(a)(5)(D) of the MMPA established an expedited process by which citizens of the U.S. can apply for an authorization to incidentally take small numbers of marine mammals by harassment. Except with respect to certain activities not relevant here, the MMPA defines "harassment" as

> "...any act of pursuit, torment, or annoyance which (a) has the potential to injure a marine mammal or marine mammal stock in the wild [Level A harassment]; or (b) 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]." (16 USC 1362(18))

Section 101(a)(5)(D) establishes a 45-day time limit for NMFS review of an application followed by a 30-day public notice and comment period on any proposed authorizations for the incidental harassment of small numbers of marine mammals. Within 45 days of the close of the comment period, NMFS must either issue or deny issuance of the authorization.

The purpose of the replacement and repair of the northern fur seal observation towers and walkways is to provide safe access for fur seal researchers into the dense breeding aggregations of northern fur seals. Safe access for researchers is required because northern fur seals exhibit strong site fidelity, tenacity, and high levels of aggression within dense aggregations. In addition, non-territorial fur seals are sensitive to human presence within and near breeding areas as a result of visual, auditory and olfactory stimuli. The observation towers and walkways provide elevated access to observe and count breeding and resting northern fur seals that minimize the stimuli that influence fur seal behavior. In order to provide flexibility in the construction schedule to complete the replacement and repair of the observation towers and walkways during a single winter and spring season NMFS Alaska Region (NMFS AKR) has identified a need to authorize incidental taking of northern fur seals hauling out on St. Paul Island during their intermittent and early season presence through 7 June, 2010 and again in December, 2010, if needed. On February 2, 2010, NMFS received an IHA application from NMFS AKR requesting NMFS issue an IHA for the take, by Level B harassment only, of small numbers of northern fur seals incidental to the replacement and repair of northern fur seal observation towers and walkways on St. Paul Island, Alaska. NMFS shall issue the authorization, if the action proposed in the IHA application will result in no more than harassment, have no more than a negligible impact on the species or stock, will not have an unmitigable adverse impact on the availability of the species or stock for subsistence uses, and the permissible methods of taking and required monitoring are set forth.

1.2 OTHER Environmental Assessment (EA)/Environmental Impact Statement THAT INFLUENCE SCOPE OF THIS EA

Previous NEPA documents have assessed the effects of fishing and subsistence hunts on northern fur seals (NMFS, 2005), and analyzed the effects of Steller sea lion and northern fur seal research (NMFS, 2007). However, there have been no previous NEPA analyses focused solely on incidental harassment of northern fur seals from replacement and repair of fur seal research observation towers and walkways on St. Paul Island, Alaska.

1.3 SCOPING SUMMARY

The purpose of scoping is to identify the issues to be addressed and the significant issues related to the proposed action, as well as identify and eliminate from detailed study the issues that are not significant or that have been covered by prior environmental review. An additional purpose of the scoping process is to identify the concerns of the affected public and Federal agencies, states, and Indian tribes. CEQ regulations implementing the National Environmental Policy Act of 1969 (NEPA; 42 U.S.C. 4321 *et seq*.) do not require that a draft EA be made available for

public comment as part of the scoping process. However, the draft final EA was made available for review concurrent with the requisite 30-day public comment period for the proposed IHA, and NMFS will consider any comments received from the public.

Pursuant to 50 CFR §216.33(d)(2), NMFS consulted with the Marine Mammal Commission (MMC) in reviewing the application for an IHA under the MMPA. Concurrent with the publication of the proposed IHA in the *Federal Register* for the availability of public comment, copies of the IHA application and draft EA were forwarded to the MMC and its Committee of Scientific Advisors for review.

1.4 APPLICABLE LAWS AND NECESSARY FEDERAL PERMITS, LICENSES, AND ENTITLEMENTS

This section summarizes federal, state, and local permits, licenses, approvals, and consultation requirements necessary to implement the proposed action, as well as who is responsible for obtaining them. Even when it is the applicant's responsibility to obtain such permissions, NMFS is obligated under NEPA to ascertain whether the applicant is seeking other federal, state, or local approvals for their action.

1.4.1 National Environmental Policy Act

The National Environmental Policy Act (NEPA) was enacted in 1969 and is applicable to all "major" federal actions significantly affecting the quality of the human environment. A major federal action is an activity that is fully or partially funded, regulated, conducted, or approved by a federal agency. NMFS has determined that repair and replacement of research towers and walkways are necessary to safely continue basic population monitoring and support continued research into the current decline in northern fur seal abundance on St. Paul Island. While NEPA does not dictate substantive requirements for permits, licenses, etc., it requires consideration of environmental issues in federal agency planning and decision making. The procedural provisions outlining federal agency responsibilities under NEPA are provided in the Council on Environmental Quality's implementing regulations (40 CFR Parts 1500-1508).

NMFS has, through NOAA Administrative Order (NAO) 216-6, established agency procedures for complying with NEPA and the implementing regulations issued by the Council on Environmental Quality. NAO 216-6 specifies that repair and replacement of the research towers and walkways is exempted (categorically excluded) from further environmental review. Negotiation during contracting, however, identified the need for a longer construction season based on the high uncertainty in the terrain and weather conditions during the winter and spring. In order to extend the construction season through May and into early June NMFS has determined that construction activities may incidentally harass adult male northern fur seals. The request to extend the construction season for replacement and repair of research towers and walkways would otherwise be categorically excluded, but now requires an incidental harassment authorization (IHA), preparation of an EA or EIS, and marine mammal monitoring.

While extending the construction season for replacement and repair of research towers and walkways is typically subject to a categorical exclusion, as described in NAO 216-6, NMFS is preparing an EA for this action to provide a more detailed analysis of effects to northern fur seals. This Environmental Assessment is prepared in accordance with NEPA, its implementing regulations, and NOAA 216-6.

1.4.2 Marine Mammal Protection Act

The MMPA prohibits takes of all marine mammals in the U.S. (including territorial seas) with a few exceptions. Section 101(a)(5)(D) of the MMPA (16 U.S.C. 1361 *et seq*.) directs the Secretary of Commerce to allow, upon request, the incidental, but not intentional taking, by harassment, 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. If the action proposed in the IHA application will result in no more than harassment, have no more than a negligible impact on the species or stock, will not have an unmitigable adverse impact on the availability of the species or stock for subsistence uses, and the permissible methods of taking and required monitoring are set forth, then the NMFS shall issue the authorization.

1.4.3 Fur Seal Act

The Fur Seal Act (FSA) is applicable to actions requesting takes of northern fur seals in the Pribilof Islands, Alaska. The FSA requires the Secretary to conduct research on northern fur seal resources as necessary for the U.S. to meet its obligations under the Interim Convention on the Conservation of North Pacific Fur Seals. The Secretary must permit, subject to necessary terms and conditions, the taking of fur seals for educational, scientific or exhibition purposes (16 U.S.C. § 1154). While the FSA has provisions for research and permits for intentional taking, there are no clear prohibitions for incidental taking or provisions to authorize incidental taking, and as such the MMPA has precedence.

1.4.4 Coastal Zone Management Act

Congress enacted the Coastal Zone Management Act (CZMA) (16 U.S.C. 1451 *et seq*.) to protect the coastal environment from growing demands associated with residential, recreational, commercial, and industrial uses (e.g., State and Federal offshore oil and gas development). Those coastal states with an approved Coastal Zone Management Plan, which defines permissible land and water use within the state's coastal zone [1], can review Federal actions, licenses, or permits for "Federal consistency." "Federal consistency" is the requirement that those Federal permits and licenses likely to affect any land/water use or natural resources of the coastal zone be consistent with the Program's enforceable policies. NMFS reviewed the Federal Agency Guide for the State of Alaska Coastal Management Plan and identified that the Pribilof Islands are part of the Southwest Alaska district and St. Paul Island is identified in quad map #72; however there is no local Coastal Zone Management Plan for St. Paul Island.

CHAPTER 2 ALTERNATIVES INCLUDING THE PROPOSED ACTION

This chapter describes the range of potential actions (alternatives) determined reasonable with respect to achieving the stated objective, as well as alternatives eliminated from detailed study. This chapter also summarizes the expected outputs and any related mitigation of each alternative.

2.1 ALTERNATIVE 1 – PROPOSED ACTION (ISSUANCE OF IHA)

Under the proposed action repair and replacement of the research observation towers and walkways would proceed from January through May and into early June incidentally harassing small numbers of resting northern fur seals on St. Paul Island under an IHA in May and June. Northern fur seals are not predictably present on land in the Pribilof Islands during the winter and early spring. The proposed action includes summer and fall construction restrictions to protect northern fur seals from disturbance during the breeding and pup rearing period. Repair and replacement activities will include human presence within the fur seal breeding areas and use of all-terrain and 4-wheel drive vehicles to transport personnel, equipment, and materials. Construction crews will use hand and power tools, gas-powered generators, and air compressors. Construction crews will need to demolish and remove old towers and walkways prior to replacement of new structures. Large boulders or uneven terrain will be altered to facilitate construction or access to areas where new foundations are to be placed. Biologists would begin daily monitoring for the presence of fur seals on April 20, 2010 and record the number and response of northern fur seals to the proposed actions until June 7, 2010. Construction activities will cease and demobilization will begin if the incidental taking of northern fur seals approaches and is predicted to exceed that authorized in the IHA prior to June 1, otherwise all construction activities will cease on June 7, 2010. Activities may resume December 1, 2010 as well.

2.2 ALTERNATIVE 2 – NO ACTION (PROCEED WITH SPRING CONSTRUCTION TIMING RESTRICTIONS)

Under the no action alternative repair and replacement of the research observation towers and walkways would proceed from January 1 through April 20, 2010. Demolition and removal of old structures would also occur over the same period. Biologists will begin daily northern fur seal monitoring of the proposed work sites on approximately April 20, 2010. If biologists identified northern fur seals 10 m (33 ft) or more above the mean high tide mark within 100 m (328 ft) of a work site construction will be stopped and materials and equipment removed from the site.

CHAPTER 3 AFFECTED ENVIRONMENT

This chapter presents baseline information necessary for consideration of the alternatives, and describes the resources that would be affected by the alternatives, as well as environmental components that would affect the alternatives if they were to be implemented. The effects of the alternatives on the environment are discussed in Chapter 4.

St. Paul Island, Alaska within the Pribilof Islands is the affected environment. The Pribilof Islands and the surrounding Bering Sea marine environment constitute a unique ecosystem. They are located in the central Bering Sea, approximately 500 km (310 mi) west of the mainland and 300 km (185 mi) north of the Aleutian Chain. The Pribilofs support high concentrations of marine mammals, seabirds, fish, and invertebrates occupying nearshore habitats, seacliffs, beaches, sand dunes and coastal wetlands unique in the central Bering Sea.

More particularly the northern fur seal breeding areas (commonly known as rookeries) and the associated trails leading to them are the affected environment where demolition, repair, and replacement of the fur seal research observation towers and walkways will occur. The descriptions focus on physical features, major living marine resources—their biology, habitat, and current status of the resource—with special emphasis on the fur seal resource. This chapter provides an overview of the affected environment with references to scientific literature cited throughout the text.

3.1 PHYSICAL ENVIRONMENT

3.1.1 Saint Paul Island

St. Paul Island is one of the two larger inhabited islands of the Pribilof Islands; two small rocky islets, Otter Island and Walrus Island; and a small rocky outcropping known as Sea Lion Rock are within a few miles of St. Paul Island. St. Paul is 44 square miles in area, and is the northernmost island, situated 47 mi (76 km) NNW of St. George, and 100 km (62 mi) from the shelf break.

The biological environment under consideration is nearshore terrestrial habitat above the storm tide level (~5.2 m [17 ft] above sea level) extending inland less than 1.6 km (1 mi). Researchers use observation towers and walkways on 10 of 15 St. Paul northern fur seal rookeries. These rookeries include Reef, Gorbatch, Kitovi, Zapadni Reef, Little Zapadni, Big Zapadni, Polovina, Polovina Cliffs, Vostochni and Morjovi. Reef rookery, the primary construction site, is approximately 945 m (3,100 ft) in length and is divided into 11 sections with structures constructed in strategic areas giving researchers the best vantage points to observe northern fur seals at the peak of breeding season. Many of the structures are located within areas that adult male northern fur seals select as a territory prior to the peak of the breeding season.

The Pribilof Islands are of volcanic origin consisting of multiple eruptive centers with generally moist tundra soils formed from volcanic ash with rock, gravel, sand, and marine sediment deposits. St. Paul has mostly rolling upland plateau from basaltic lava flows with cinder cones and subterranean lava tubes. There are widespread rocky and sandy beaches backed by dunes, significant seacliff habitat along the western coastline and the only estuary on the Pribilof

Islands, Salt Lagoon. The islands are treeless and vegetated in tall grasses, wet to dry tundra, dwarf shrub communities and scattered small-patch wetlands depending on the geology.

The Pribilofs have a maritime climate with windy, cloudy conditions and frequent precipitation throughout the year. Temperatures range between a low of -30° F to a high of 64° F but typically average between 19-51° F on St. Paul and 24-52° F on St. George. In the summer, there is heavy fog and almost continual cloud-cover. Temperatures typically range in the upper 30's to 40's° F. May through October. Winters are dominated by freezing conditions and frequent blizzards. Seasonal sea ice is often present offshore, and in severe winters the ice can surround the islands for months.

3.1.2 Sanctuaries, Parks, Historic Sites, etc.

The northern fur seal rookeries on St. Paul Island are part of the Seal Islands National Historic Landmark designated in 1962. Many of the observation towers and walkways were built and had been used to facilitate northern fur seal research at the time of designation, but were not listed as contributing structures to the Landmark.

3.1.3 Essential Fish Habitat

The action area is terrestrial habitat; none of the activities in the Proposed Action are directed at or likely to occur within any designated EFH.

3.2 BIOLOGICAL ENVIRONMENT

3.2.1 ESA Listed Marine Mammals

Seven species of large whales that occur in Alaska are listed under the ESA including the following: the north Pacific right whale, fin whale, sei whale, blue whale, sperm whale, bowhead whale and the humpback whale. None of these species are affected by the proposed action either individually or as part of a larger cumulative effect of the action on the environment. They are not considered further in this analysis.

The western population of Steller sea lions (*Eumetopius jubatus*) is the only pinniped species listed under the ESA and found near St. Paul Island. In 1990, the Steller sea lion was listed as threatened under the Endangered Species Act (ESA) throughout its range (55 FR 12645, 55 FR 13488, 55 FR 49204, 55 FR 50005). In 1997, the NMFS reclassified Steller sea lions as two distinct population segments under the ESA (62 FR 24345). The population segment west of 144° W, or approximately at Cape Suckling, Alaska, was reclassified as endangered. The eastern stock remains listed as threatened.

The Steller sea lion ranges along the North Pacific Ocean rim from northern Japan to California (Loughlin *et al*., 1984), with centers of abundance and distribution in the Gulf of Alaska (GOA) and Aleutian Islands, respectively. The northernmost breeding colony in the Bering Sea is on Walrus Island.

Habitat includes both marine waters and terrestrial rookeries (breeding sites) and haul-outs (resting sites). Pupping and breeding occur during June and July in rookeries on relatively remote islands, rocks, and reefs. Females generally return to the rookeries where they were born to mate and give birth (Alaska Sea Grant, 1993; Calkins and Pitcher, 1982; Loughlin *et al*., 1984).

Walrus Island is the only active Steller sea lion breeding ground on the Pribilof Islands. It is located approximately 12 km (7.5 mi) East of St. Paul Island. The use of Walrus Island as a breeding ground for Steller sea lions is reported intermittently throughout history. There are several periods in which Steller sea lions have abandoned the island as a breeding ground due to overexploitation and harassment (Kenyon, 1962). During these periods, sea lions used the island as a haul-out. The number of Steller sea lion pups born on Walrus Island ranges from no pups born to a high of 2,866 pups born in 1960 (Table 1).

Table 1. Summary of the number of Steller sea lion pups born on Walrus Island, Pribilofs, Alaska 1954-2005.

Year	Number of pups born
1954*	2,797
1958*	2,250
1960*	2,866
1984-1989**	334
1990-1992**	63
1994**	61
1997**	35
2001-2002**	39
2005**	29

*Kenyon 1962
**Fritz *et al*., 2009

Steller sea lions haul out intermittently year-round at Sea Lion Rock, Otter Island, Sea Lion Neck and Northeast Point. No recent Steller sea lion counts are available for any of these locations. Data is unavailable on the certain numbers of Steller sea lions that do haul out on St. Paul Island proper (Williams, pers. comm.).

3.2.2 Northern Fur Seals

Northern fur seals (*Callorhinus ursinus*) are colonial breeding pinnipeds that exhibit strong site fidelity and currently breed on a few islands in the North Pacific Ocean and Bering Sea. Over 50 percent of the worldwide population of fur seals is found on the Pribilof Islands. Adult male fur seals, about 3-5 times larger than females, begin to arrive at rookeries in mid-May and defend territories within the rookery. Breeding females begin to arrive on the rookeries in mid-June and within a few days give birth and nurse their single pup. Lactating females cycle between on shore attendance and at-sea foraging trips for the ~5-month nursing period (July-November).

Some males and most females probably return to their natal sites to breed (Baker *et al*., 1995; Gentry, 1998). Adult males arrive first and establish territories on the breeding rookeries. On

the Pribilof Islands they arrive in descending order by age, beginning in early May. The youngest males may not return to the breeding areas until mid-August or later. Male fur seals become sexually mature at 5-7 years of age and begin competing for a territory after about 7 to 9 years of age (Johnson, 1968). Adult territorial males fast while defending territories until mid-August. Territories are small, averaging a maximum area of approximately 110 m^2 (1,184 ft^2) (Gentry, 1998). Sub-adult males are not territorial and will not typically remain at a particular resting site after being harassed, but instead may haul out at another site or stay at sea (Gentry, 1981). They may return to their natal breeding area after going to sea, but the at-sea interval is highly variable (Sterling and Ream, 2004).

NMFS designated the Pribilof Islands northern fur seal population depleted on June 17, 1988 because it declined to less than 50 percent of levels observed in the late 1950s and no compelling evidence suggested that the northern fur seal carrying capacity (K) of the Bering Sea had changed substantially since the late 1950s. Towell and Ream (2008) report that the 2008 pup production estimate for St. Paul Island was 6.6 percent less than the estimate in 2006. The 2008 pup production estimate for St. George Island was 6.4 percent greater than the estimate in 2006. Since the depleted designation in 1988 pup production on St. Paul has declined by 40% (171,610 pups born to 102,674) and on St. George by 27% (24,280 pups born to 18,160).

Due to the variability in fur seal arrival times we have estimated the predicted number of adult (7 years old and older) male fur seals present based on the figures presented in Gentry (1998). Estimates are based on maximum counts of class 2 and 3, territorial, and class 5, non-territorial, males on the Reef rookery during 2006 (Fowler *et al*., 2006). The maximum number of adult male fur seals on their breeding islands occurs during the second week of July (Gentry, 1998; Antonelis, 1992). NMFS AKR predict based on the arrival curve (see figure 3.1 in Gentry, 1998) approximately 1% of the maximum number of adult males will be present on St. Paul island rookeries during the last week of April, 10% during the first week of May, 20% during the second week of May, 40% during the third week of May, and 50% during the last week of May. See Table 2-a through 2-e for a daily summary of predicted number of adult male fur seals taken for each week on Reef rookery.

Using the 2006 bull counts, NMFS AKR applied Gentry's arrival curves to predict the estimated number of seals present in each month during the proposed construction activities.

Table 2-a. Estimated daily take of adult male northern fur seals on Reef rookery during the last week of April. Estimate based on 1% of the maximum 2006 bull counts.

Class					**Section**						
Bull											
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
2	0.13	0.26	0.27	0.1	0.22	0.21	0.05	0.27	0.22	0.11	0.03
3	0.48	0.81	0.63	0.46	0.67	0.7	0.01	0.66	0.37	0.28	0.04
5	0.08	0.27	0.4	0.47	0.31	0.13	0.15	0.31	0.34	0.72	1.42
Total Taking by Harassment Week 1: **57.9**											

Table 2-b. Estimated daily take of adult male northern fur seals on Reef rookery during the first week of May. Estimate based on 10% of the maximum 2006 bull counts.

Class	**Section**										
Bull	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
2	1.3	2.6	2.7	1	2.2	2.1	0.5	2.7	2.2	1.1	0.3
3	4.8	8.1	6.3	4.6	6.7	7	0.1	6.6	3.7	2.8	0.4
5	0.8	2.7	4	4.7	3.1	1.3	1.5	3.1	3.4	7.2	14.2
Total Taking by Harassment Week 2: **810.6**											

Table 2-c. Estimated daily take of adult male northern fur seals on Reef rookery during the second week of May. Estimate based on 20% of maximum 2006 bull counts.

Class	**Section**										
Bull	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
2	2.6	5.2	5.4	2	4.4	4.2	1	5.4	4.4	2.2	0.6
3	9.6	16.2	12.6	9.2	13.4	14	0.2	13.2	7.4	5.6	0.8
5	1.6	5.4	8	9.4	6.2	2.6	3	6.2	6.8	14.4	28.4
Total Taking by Harassment Week 3: **1621.2**											

Table 2-d. Estimated daily take of adult male northern fur seals on Reef rookery during the third week of May. Estimate based on 40% of maximum 2006 bull counts.

Class	**Section**										
Bull	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
2	5.2	10.4	10.8	4	8.8	8.4	2	10.8	8.8	4.4	1.2
3	19.2	32.4	25.2	18.4	26.8	28	0.4	26.4	14.8	11.2	1.6
5	3.2	10.8	16	18.8	12.4	5.2	6	12.4	13.6	28.8	56.8
Total Taking by Harassment Week 4: **3242.4**											

Table 2-e. Estimated daily take of adult male northern fur seals on Reef rookery during the last week of May. Estimate based on 50% of maximum 2006 bull counts.

Class	**Section**										
Bull	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
2	6.5	13	13.5	5	11	10.5	2.5	13.5	11	5.5	1.5
3	24	40.5	31.5	23	33.5	35	0.5	33	18.5	14	2
5	4	13.5	20	23.5	15.5	6.5	7.5	15.5	17	36	71
Total Taking by Harassment Week 5: **4053**											

In total NMFS AKR estimates there may be up to 9,785 takes by incidental harassment of 579 adult male northern fur seals during the 5-week period extending from the last week of April through May 2010. NMFS AKR used the 2006 adult male counts because they were available and partitioned by section and because of the continued decline of northern fur seals provided us with a conservative (i.e., biased high) estimate. The total number of individual adult males was

derived by dividing the weekly take estimate by 7 and summing the daily estimate, under the direct evidence that territorial males will not leave their chosen site without intensive and directed displacement efforts (Gentry, 1998). Class 5 adult males are not territorial by definition (Antonelis, 1992) and there is limited evidence (Gentry, 1998) to suggest that class 5 adult males are not present on land in May and early June. If NMFS AKR uses just Class 2 & 3 adult males the estimate of take and the number of adult males harassed is 5,912 and 349, respectively. Fowler *et al*., (2006) counted 9,952 adult males in 2006, thus approximately 5% of the adult male population may be affected by the preferred alternative.

There are no reliable estimates of sub-adult (2 to 6 year old) males to estimate the number of fur seals potentially present during the 5-week construction period. NMFS AKR does know that sub-adult males may be present daily during this period, but can range from 0 to a few hundred fur seals at any particular rookery or hauling ground site. NMFS AKR estimate 1000 sub-adult males may be taken by harassment during the 5-week period. NMFS AKR does not predict that sub-adult males will be taken multiple times like adult male northern fur seals.

3.2.3 Seabirds

Many seabirds and sea ducks use the nearshore waters surrounding the Pribilof Islands during the winter, and only glaucous gulls (*Larus hyperboreus*) are regularly present during the winter and spring. Glaucous gulls are omnivorous during this time of year primarily feeding on offal and fish waste associated with fish processing operations on St. Paul. Glaucous gulls do not breed on St. Paul Island. Least auklets (*Aethia pusilla*) breed on St. Paul Island and are one of the most abundant seabirds in North America, with a total population of about nine million. Least auklets dive for plankton, nest in huge colonies in rock crevices, lay just one egg each year beginning in early June (Jones, 1992), and the incubating bird is usually not visible from outside. This species breeds on the Aleutian Islands and the Pribilof Islands including various locations on St. Paul Island including within northern fur seal rookeries, and winters at sea near breeding sites. The least auklet is a socially monogamous species and mate choice is mutual, but there is relatively low mate fidelity between breeding seasons. This species has a low survival rate relative to other alcids, with a predicted average life expectancy of about 4.5 years. Sub-adult (2-yr-old) and non-breeding adult least auklets attend colony sites and actively investigate crevices in years before breeding is attempted. Nest sites may be excavated where the crevice is clogged with mud, feces, or other detritus. Pairs may be prevented from breeding by a shortage of suitable nest crevices (Roby and Brink, 1986b). Pairs normally reuse the same crevice from one year to the next (Roby and Brink, 1986a).

Least auklets prefer areas with smaller boulders and narrower crevices, perhaps in part related to inter-specific competition for nest sites. Nesting can occur in areas with rock diameters of 0.2–0.75 m (0.7-2.5 ft), and in some areas they predominantly use cliff crevices. In colonies with deep talus, nests may be located several meters beneath surface. Least auklets normally lay their egg directly on bare rock, on collections of small pebbles and detritus in a rock crack, or on unmodified soil substrate.

3.3 SOCIAL AND ECONOMIC ENVIRONMENT

St. Paul Island is a remote subsistence and commercial fishing community located in the southeast Bering Sea. There are approximately 450 residents on St. Paul Island according to the most recent census. Aleuts (and other Alaska Natives) are the primary residents of St. Paul Island accounting for approximately 86.5% of the community with the remainder being of Caucasian or Asian descent. St. Paul Island includes an incorporated second class city, Tanadgusix Corporation office, the Pribilof Islands School District office, Central Bering Sea Fisherman's Association office, AC Store, Aleutian/Pribilof Islands Association Health Center, and harbor facilities. The National Weather Service forecast office, U.S. Coast Guard Loran Station, and U.S. Postal Service have year-round staffed facilities. The National Marine Fisheries Service and U.S. Fish and Wildlife Service have seasonal staff presence on St. Paul Island.

Northern fur seals, Steller sea lions, halibut, reindeer and various sea ducks comprise the primary subsistence resources for St. Paul Island. Numerous additional species are also used but at relatively lower rates of consumption compared to these species. Recent consumption estimates for these species are not available, but in total may contribute to over 75% of the diet for some community members, with the average of about 40%.

Northern fur seals are not allowed to be harvested on land by Alaska Natives outside the harvest season described at 50 CFR 216.72. 50 CFR 216.72(c)(1) states that "no fur seal may be taken on the Pribilof Islands before June 23 each year." Therefore, there will be no impact on subsistence use of northern fur seals (see subsistence use section below).

Commercial halibut fishing provides the majority of the non-governmental revenue on St. Paul Island. There are both local Individual Fishing Quotas and a Community Development Quota for the commercial harvesting of halibut. In 2008 the total commercial halibut harvest was 777,000 lbs with an ex-vessel price of $2.70/lb. Median AGI is $50,750, per capita income is $18,408.

3.4 IMPACT OF AVAILABILITY OF AFFECTED SPECIES FOR TAKING FOR SUBSISTENCE USES

Under the MMPA, NMFS must determine that an activity would not have an unmitigable adverse impact on the subsistence needs for marine mammals. While this includes usage of both cetaceans and pinnipeds, the primary impact by construction activities is expected to be impacts from replacement and repair of fur seal research observation towers and walkways on northern fur seals. In 50 CFR 216.103, NMFS has defined unmitigable adverse impact as:

> An impact resulting from the specified activity: (1) That is likely to reduce the availability of the species to a level insufficient for a harvest to meet subsistence needs by: (i) causing the marine mammals to abandon or avoid hunting areas, (ii) directly displacing subsistence users, or (iii) placing physical barriers between the marine

mammals and the subsistence hunters; and (2) That cannot be sufficiently mitigated by other measures to increase the availability of marine mammals to allow subsistence needs to be met.

Northern fur seals are not allowed to be harvested on land by Alaska Natives outside the harvest season described at 50 CFR 216.72. 50 CFR 216.72(c)(1) states that "no fur seal may be taken on the Pribilof Islands before June 23 of each year." Therefore there will be no impact on subsistence use of northern fur seals. Steller sea lion subsistence hunting occurs during the winter and spring on the Reef Peninsula. Steller sea lion subsistence hunting does not occur at the tower and walkway sites on Reef Rookery. Hunting effort is primarily located at Gorbatch and Ardiguen Rookeries as well as the bluffs along the east shore to the north of Reef Rookery. Other sea lion hunting areas are not typically associated with fur seal towers and walkways and therefore would not be affected.

NMFS AKR has discussed the potential overlap between the construction season and location with subsistence hunting with the Tribal Government of St. Paul Island's Ecosystem Conservation Office (Tribal ECO) staff. The NMFS AKR has ongoing communication with Steller sea lion hunters through the Tribal Government of St. Paul Island. As part of the cooperative management agreement between NMFS and the Tribal Government of St. Paul under section 119 of the MMPA, NMFS regularly communicates agency project plans and subsistence needs and activities. Most subsistence activities occur during the summer per the subsistence harvest regulations at 50 CFR 216 subpart F. Annual reports submitted to NMFS of subsistence marine mammal harvests indicate most hunting occurs at Northeast Point. Winter subsistence harvests occur at many locations surrounding St. Paul Island and are not concentrated at any locations where tower or walkway work would be conducted.

The number of individual northern fur seals likely to be impacted by construction operations is expected to be relatively low. With the proposed monitoring and mitigation measures described above, which include seasonal restrictions, the construction operations are not expected to cause seals to abandon/avoid subsistence hunting areas, directly displace subsistence users, or place physical barriers between the marine mammals and the subsistence hunters. Effects on most individual seals are expected to be limited to localized and temporary displacement (Level B harassment). The taking by harassment is not expected to result in an unmitigable adverse impact on the availability of such species for taking for subsistence uses.

CHAPTER 4 ENVIRONMENTAL CONSEQUENCES

This chapter represents the scientific and analytic basis for comparison of the direct, indirect, and cumulative effects of the alternatives. Regulations for implementing the provisions of NEPA require consideration of both the context and intensity of a proposed action (40 CFR Parts 1500-1508).

4.1 EFFECTS OF ALTERNATIVE 1: PROPOSED ACTION (ISSUANCE OF IHA)

Issuance of the IHA will allow for an extended construction season in the event that unforeseen delays occur during the winter. NMFS anticipates that a lengthened construction season will increase the probability of the contractor to complete their job in a single season in addition to increasing the duration or availability of local employment opportunities. Additional winter and spring employment will result in a positive effect on the local community. St. Paul Island has highly seasonal employment, depending on fishing effort for crab and halibut.

Issuance of the IHA will have no effect on the physical environment. The incidental harassment of small numbers of adult and possibly sub-adult male northern fur seals will occur within the Seal Islands National Historic Landmark, but the landmark will not be adversely affected and no loss or destruction of significant scientific, cultural or historical resources will occur as the research observation towers and walkways are not part of the Landmark. Consultation with the Alaska Coastal Management Program has indicated a negative determination under the Coastal Zone Management Program for the issuance of an IHA for this action.

Issuance of the IHA will not adversely affect endangered Steller sea lions or modify their critical habitat. There are no designated Steller sea lion hauling grounds, rookeries, or critical habitat on St. Paul Island. If Steller sea lions are observed in the action area, the work will cease as taking of Steller sea lions is not authorized.

Issuance of the IHA will cause the construction period to overlap with the pre-laying period of least auklets breeding in the cobble and boulder habitat on Reef rookery. During the pre-laying period least auklets examine previously-used nesting sites and new sites. They may be displaced for short periods of time by construction activities; however the number and density of least auklets using the nearshore habitats at Reef rookery are unknown. The effect of short-term displacement from potential nest sites during the pre-laying period are unknown, as it is extremely difficult to study least auklet nesting behavior and success without some short-term displacement during the pre-laying and early egg-laying period (Roby and Brink, 1986b). Some previously used nesting sites may be lost. NMFS predicts least auklets may use the rock-filled foundations of the replacement towers and walkways as they have used newly placed harbor rip-rap on St. Paul and St. George Islands, and the net result would be an increase in potential nest sites. Least auklets may be affected by the loss of a few previously used nest sites covered by the new foundations, but the new foundations may provide replacement nesting habitat as has been observed in newly placed rip-rap within the harbors on St. Paul and St. George.

Issuance of the IHA will directly affect adult male northern fur seals for at most 5 weeks. The predicted direct effect on adult male northern fur seals may include changes in time spent in their normal behavioral activity. NMFS estimates adult male fur seals may increase the time spent

alert, moving, and in territorial defense. Adult male fur seals may also depart from land into the water or delay their arrival on land, all of these behaviors occur normally as a result of interactions among adult males. During May adult males spend their time resting or alert defending their territory after spending the winter at sea.

NMFS does not anticipate any negative indirect effects of incidental taking or the newly designed observation towers on northern fur seals. The towers and walkways are to be built in the exact or very near the locations of the current research structures, which have been in place for at least 50 years. Northern fur seals have strong site fidelity and have returned to breeding sites surrounding the research towers and walkways. For example, northern fur seal site fidelity is so strong that they continue to occupy territories and rear pups within Reef Rookery surrounding the shipwreck of the *Ocean Clipper* since 1987. The design of the replacement towers occurred in consultation with numerous biologists from the National Marine Mammal Laboratory for approximately two years, and the new design may result in less incidental harassment of breeding and resting northern fur seals during the course of subsequent research activities (positive indirect effect). Gentry (1998) experimented with complete displacement of territorial males from their terrestrial sites in early June. He found that over 80% of adult males returned within seven hours to their original territory site with less aggression than required to originally secure the site. Thus territorial adult males are highly resistant to disturbance at the time of year we are requesting authorization for incidental harassment. Some individual territorial males were so resistant to harassment that it required four to six people with poles and noisemakers to move them from their sites. We anticipate most incidental harassment to result in little if any movement of territorial adult males.

NMFS predicts approximately 5% (579 individuals) of the total number of adult male northern fur seals (~10,000 individuals) may be exposed to construction activities in the preferred alternative during the five week construction period from late April until the first week of June. NMFS predicts less than 1% (1,000 individuals) of the sub-adult male population may be exposed to construction activities during this same period. At least 60% of the adult males exposed to construction activities will be exposed multiple times during the 5-week period in the preferred alternative. The estimate for the percentage of individual adult males exposed multiple times is based on the proportion of territorial males (Class 2 and 3) to the total maximum adult male count.

4.2 EFFECTS OF ALTERNATIVE 2: NO ACTION (PROCEED WITH SPRING CONSTRUCTION TIMING RESTRICTIONS)

Restricting the construction season to date of arrival of adult male northern fur seals will result in high variability in construction scheduling and no buffer against unforeseen construction delays. NMFS anticipates that a shortened construction season will decrease the probability of the contractor to complete their job in a single season. Because of the shortened season and potential for two construction seasons NMFS anticipates the contractor may reduce hiring local labor. Fewer construction jobs will be available with shortened annual construction season that potentially will extend over two seasons.

There will be no effect on the physical environment if the IHA is not issued. Least auklets will not be disturbed during the pre-laying period if the IHA is not issued.

Adult and sub-adult male northern fur seals will not be directly affected if the IHA is not issued. Indirect effects from not issuing the IHA may include an extension of the construction project at Reef Rookery for two winter and spring seasons. Research projects will be delayed without replacement research observation towers and walkways.

4.3 SUMMARY OF COMPLIANCE WITH APPLICABLE LAWS, NECESSARY FEDERAL PERMITS, LICENSES, AND ENTITLEMENTS

As summarized below, NMFS has determined that the proposed incidental harassment authorization is consistent with the purposes, policies, and applicable requirements of the MMPA, ESA, and NMFS regulations. NMFS issuance of the permit would be consistent with the MMPA and ESA.

4.3.1 Endangered Species Act

NMFS does not anticipate any Steller sea lions will be encountered on land within the northern fur seal rookeries during this time of year. The only Steller sea lion rookery is located on Walrus Island and use of other sites is highly unpredictable.

4.3.2 Marine Mammal Protection Act

NMFS AKR (the applicant) submitted an application for an authorization under 101(a)(5)(D) which included responses to all applicable questions in the application instructions. The requested take by incidental harassment for the proposed construction activities is consistent with applicable issuance criteria in the MMPA and NMFS implementing regulations. The views and opinions of scientists or other persons or organizations knowledgeable of the marine mammals that are the subject of the application or of other matters germane to the application were considered, and support NMFS' initial determinations regarding the application.

The authorization would specify:

(1) the effective dates of the permit;
(2) the number and kinds (species and stock) of marine mammals that may be taken;
(3) the location and manner in which they may be taken; and
(4) monitoring, mitigation, and reporting (to ensure IHA compliance) requirements.

4.3.3 Fur Seal Act

The Fur Seal Act (FSA) has provisions for research and permits for intentional taking, there are no clear prohibitions for incidental taking or provisions to authorize incidental taking, and as such the MMPA has precedence. The Secretary of Commerce can permit incidental harassment and access to fur seal breeding areas. See section 4.3.2 for consistency with the MMPA.

4.3.4 Coastal Zone Management Act

NMFS has identified a negative determination for the Coastal Zone Management Act (CZMA) and a consistency determination under the CZMA is not required.

4.4 COMPARISON OF ALTERNATIVES

Issuing an incidental harassment authorization for northern fur seals during construction may affect approximately 579 adult males and 1,000 sub-adult males. The authorization will ensure the construction of safe new replacement behavioral observation towers and walkways can be completed during a single construction season.

	Physical Env.	Biological	Biological: NFS	Soc/Eco. Env.
Alt. 1: Issue IHA	**±**	N.E.	**-** n.s.	**+**
Alt. 2: No IHA	**±**	N.E.	N.E.	**-**

± *means minor positive and negative effects that are insignificant*; NFS means northern fur seal; N.E. *means "No Effect"*; n.s. *means population effects that are not significant*; **+** *means positive individual effects*; **-** *means negative individual effects*

4.5 MITIGATION MEASURES

In order to issue an Incidental Take Authorization (ITA) under Section 101(a)(5)(D) of the MMPA, NMFS must set forth the permissible methods of taking pursuant to such activity, and other means of effecting the least practicable impact on such species or stock and its habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of such species or stock for taking for certain subsistence uses.

Northern fur seals are the only marine mammal species managed by NMFS expected to be present in the project area during the planned construction activities. The construction season has been chosen based on the minimum likelihood of encountering breeding and nursing northern fur seals. The amount of work and weather conditions during the winter season necessitates providing some contingency arrangements for work to be completed when few if any fur seals are found on land. In addition, the outlying periods requested are prior to the arrival and after the departure of the most sensitive fur seals (i.e., adult females and unweaned pups). Gentry (1998) experimented with complete displacement in early June of territorial males from their terrestrial sites. He found that over 80 % of adult males returned within seven hours to their original territory site with less aggression than required to originally secure the site. Thus territorial adult males are highly resistant to disturbance at the time of year NMFS AKR is requesting authorization for incidental harassment. Some individual territorial males were so resistant to harassment that it required four to six people with poles and noisemakers to move them from their sites.

Thus the combination of a winter and spring construction season along with incidental harassment of small numbers of adult and sub-adult male northern fur seals will minimize the potential for adverse impacts to the population and habitat. The habitat is further protected

because the ground is frozen and resistant to erosion and degradation due to vehicle traffic. In addition to the mitigation described above, NMFS AKR will also instruct field personnel to approach sites cautiously, choose a route that minimizes the potential for disturbance of pinnipeds; and after each site visit, the site will be vacated as soon as possible so that it can be re-occupied by pinnipeds that may have been disturbed. The implementation of a monitoring and mitigation program is expected by NMFS to achieve the least practicable adverse impact upon the affected species or stock.

4.6 MONITORING AND REPORTING MEASURES

In order to issue an IHA for an activity, Section 101(a)(5)(D) of the MMPA states that NMFS must set forth "requirements pertaining to the monitoring and reporting of such taking." The MMPA implementing regulations at 50 CFR 216.104(a)(13) indicate that requests for IHAs 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.

NMFS AKR will begin marine mammal monitoring at Reef, Gorbatch, and Ardiguen breeding areas to identify and count northern fur seals on land, their response to the presence and absence of construction activities and the timing of arrival beginning the last week of April. In addition to counts of northern fur seals monitoring will also record the type and duration of construction activities at each site where northern fur seals are identified to evaluate the construction actions potential contribution to the responses observed. Gorbatch and Ardiguen breeding areas will provide control areas with no construction activities to compare the timing of arrival and response of male northern fur seals at Reef. NMFS AKR will consider before-after/control-impact (see Underwood, 1994) study design in the final monitoring plan, method and analysis. NMFS AKR will have monitors check the site every morning before the arrival of field crew personnel for seal presence and provide the best route. In addition, they would be able to complete a "before" count that could provide a baseline for estimating incidental take.

Information recorded by observers will include: species counts, life history stage (e.g., adult, sub-adult, pup, etc.) numbers of observed disturbances (e.g., flushed into the water; moving more than 1 m [3.3 ft], but not into the water; becoming alert and moving, but do not move more than 1 m; and changing the direction of current movement), descriptions of the disturbance behaviors and responses during construction activities, closest point of approach to field crew personnel, as well as the date, time, and weather conditions. Observations of stampeding, other unusual behaviors, numbers, or distributions of pinnipeds at St. Paul Island will be reported to NMFS' NMML so that any potential follow-up observations can be conducted by the appropriate personnel. Weather observations should be recorded during activities and observations as they have strong influence on the presence/absence and behavior of pinnipeds and propagation of human scent. In addition, any chance observations of tag-bearing pinnipeds (including carcasses) as well as any rare or unusual species of marine mammals will be reported to NMFS.

If at any time injury, serious injury, or death of any marine mammal occurs that may be a result of the proposed construction activities, NMFS AKR will suspend construction activities and contact NMFS immediately to determine how best to proceed to ensure that another injury or death does not occur and to ensure that the applicant remains in compliance with the MMPA.

Any takes of marine mammals other than those authorized by the IHA, as well as any injuries or deaths of marine mammals, will be reported to the Alaska Regional Administrator and NMFS Office of Protected Resources, within 24 hours. NMFS AKR will submit a draft report to NMFS within 90 days of completing the replacement and repair activities. The monitoring report would contain a summary of information gathered pursuant to the monitoring and mitigation requirements set forth in the IHA, including detailed descriptions of observations of any marine mammal, by species, number, age class, and sex, whenever possible, that is sighted in the vicinity of the proposed project area; description of the animal's observed behaviors, and the activities occurring at the time. The location and time of each animal sighting will also be included. A final report must be submitted to the Regional Administrator and Chief of the Permits, Conservation, and Education Division within 30 days after receiving comments from NMFS on the draft final report. If no comments are received from NMFS, the draft final report will be considered to be the final report.

4.7 CUMULATIVE EFFECTS

Cumulative effects are defined as those that result from incremental impacts of a proposed action when added to other past, present, and reasonably foreseeable future actions, regardless of which agency (federal or nonfederal) or person undertakes such actions. Cumulative impacts can result from individually minor but collectively significant actions that take place over a period of time. Northern fur seals are affected directly by marine debris through entanglement, directly and indirectly by commercial fisheries, directly and indirectly by northern fur seal research, and directly and indirectly by subsistence harvests by Alaska Natives. Other cumulative effects may include climate change, anthropogenic contaminants, underwater and airborne anthropogenic noise exposure. It is unknown to what extent the known cumulative effects related to human activities are directly or indirectly related to the current decline in northern fur seals. The predicted incremental effects of incidental harassment of no more than 5% and probably far less of the male northern fur seal population prior to the breeding season are anticipated to be undetectable in any known measure on the health, survival or abundance of northern fur seals on St. Paul Island or the eastern Pacific stock.

CHAPTER 5 NEPA CONCLUSIONS

NAO 216-6 contains criteria for determining the significance of the impacts of the proposed action. In addition the Council on Environmental Quality regulations at 40 CFR 1508.27 state that the significance of an action should be analyzed in terms of "context" and "intensity". Significance was determined by considering the context (geographic, temporal, and societal) in which the action would occur, and the intensity of the effects of the action. The evaluation of the intensity included consideration of the magnitude of the impact, degree of certainty in the evaluation, the cumulative impact when the action is related to other actions, the degree of controversy, and consistency with other laws.

Context: For this action the setting is the terrestrial breeding habitat above 16 ft MLLW of the northern fur seal on St. Paul Island. Any effects of this action are limited to this area. The effect of this action on society within this area is on individuals who may directly and indirectly participate in northern fur seal research, subsistence hunt on St. Paul Island or build observation towers and walkways. Because this action is for the authorization of incidental taking for the construction and repair of observation towers and walkways, the context only applies to those individuals involved in this specific activity and less than 5% of the estimated adult male northern fur seal population.

Intensity: Listing of considerations to determine intensity of the impacts are in 40 CFR 1508.28(b) and in the NAO 216-6, section 6. Each consideration is addressed in the NMFS Finding of No Significant Impact in order as it appears in the NMFS Instruction 30-124-1 dated July 22, 2005, Guidelines for Preparation of a FONSI (Finding of No Significant Impact). The preferred alternative is the focus of the responses to the questions.

CHAPTER 6 LIST OF PREPARERS AND AGENCIES CONSULTED

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UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Silver Spring, MD 20910

Finding of No Significant Impact for the Issuance of an Incidental Harassment Authorization to Take Marine Mammals by Level B Harassment During Replacement and Repair of Northern Fur Seal Observation Towers and Walkways on St. Paul Island, Alaska

National Marine Fisheries Service

The National Marine Fisheries Service (NMFS) received an application from the NMFS Alaska Regional Office (NMFS AKR) for an incidental harassment authorization (IHA) pursuant to its responsibility to authorize the take of small numbers of marine mammals incidental to an otherwise lawful activity (other than commercial fishing), provided that NMFS determines that the action will (1) have no more than a negligible impact on the affected species or stocks of marine mammals (2) not have an unmitigable adverse impact on the availability of the species or stock(s) for certain subsistence uses, and (3) that the permissible methods of taking and requirements pertaining to the mitigation, monitoring, and reporting of such takings are set forth. NMFS has made such a determination for this authorization for the take of northern fur seals (*Callorhinus ursinus*), by Level B harassment only, incidental to construction operations (i.e., replacement and repair) of northern fur seal observation towers and walkways on St. Paul Island, Alaska.

National Oceanic and Atmospheric Administration Administrative Order (NAO) 216-6 (May 20, 1999) contains criteria for determining the significance of the impacts of a proposed action. In addition, the Council on Environmental Quality (CEQ) regulations at 40 C.F.R. 1508.27 state that the significance of an action should be analyzed both in terms of "context" and "intensity." Each criterion listed below is relevant to making a finding of no significant impact and has been considered individually, as well as in combination with the others. The significance of this action is analyzed based on the NAO 216-6 criteria and CEQ's context and intensity criteria. These include:

1) Can the proposed action reasonably be expected to cause substantial damage to the ocean and coastal habitats and/or essential fish habitat (EFH) as defined under the Magnuson-Stevens Act and identified in FMPs?

Response: The proposed action (i.e., replacement and repair activities) will include human presence within the fur seal breeding areas and use of all-terrain and four-wheel drive vehicles to transport personnel, equipment, and materials. Construction crews will use hand and power tools, gas-powered generators, and air compressors. Construction crews will need to demolish and remove old towers and walkways prior to replacement of new structures. Large boulders or uneven terrain will be altered to facilitate construction or access to areas where new foundations are to be placed.

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The biological environment under consideration is nearshore terrestrial habitat above the storm tide level (~ 5.2 m [17 ft] above sea level) extending inland less than 0.6 km (1 mi). Researchers use observation towers and walkways on 10 of 15 St. Paul Island northern fur seal rookeries. These rookeries include Reef, Gorbatch, Kitovi, Zapadni Reef, Little Zapadni, Big Zapadni, Polovina, Polovina Cliffs, Vostochni, and Morjovi. Reef rookery, the primary construction site, is approximately 945 m (3,100 ft) in length and is divided into 11 sections with structures constructed in strategic areas giving researchers the best vantage points to observe northern fur seals at the peak of breeding season. Many of the structures are located within areas that adult male northern fur seals select as a territory prior to the peak of the breeding season.

NMFS has determined that the proposed action will not result in adverse impacts to EFH. The action will occur within terrestrial habitat; none of the activities in the proposed action are directed at or likely to occur within designated EFH. The potential impacts of construction activities to marine fish populations in waters surrounding St. Paul Island are not likely measurable and considered negligible by NMFS. All actions are on land and will not cause substantial damage or adversely affect EFH. Supported by the analysis in the EA, NMFS does not expect the proposed activities involving construction operations or the issuance of an IHA to cause substantial damage to the ocean and coastal habitats and/or EFH.

2) Can the proposed action be expected to have a substantial impact on biodiversity and/or ecosystem function within the affected area (e.g., benthic productivity, predator-prey relationships, etc.)?

Response: St. Paul Island, Alaska, within the Pribilof Islands is the affected environment. The Pribilof Islands and surrounding Bering Sea marine environment constitute a unique ecosystem. They are located in the central Bering Sea, approximately 500 km (310 mi) west of the mainland and 300 km (185 mi) north of the Aleutian Island Chain. The Pribilofs support high concentrations of marine mammals, seabirds, fish and invertebrates occupying nearshore habitats, seacliffs, beaches, sand dunes and coastal wetlands unique in the central Bering Sea.

The incidental harassment of small numbers of adult and sub-adult male northern fur seals will not substantially impact biodiversity or ecosystem function. Small or unknown numbers of a few species may be present in this area and not during a sensitive ecological period. NMFS does not expect the proposed action to have any adverse impact on biodiversity or ecosystem function within the affected area.

3) Can the proposed action reasonably be expected to have a substantial adverse impact on public health or safety?

Response: NMFS does not expect any aspect of this action to have a substantial adverse impact on public health or safety. The purpose of the repair and replacement of the catwalk structures is to increase the safety of the research observation towers and walkways. The constant monitoring for marine mammals during construction operations effectively eliminates the possibility of any humans being inadvertently exposed to adverse effects from the proposed

action. Also, there is little risk of exposure to hazardous materials or wastes, risk of contracting diseases, or risk of damage from a natural disaster.

4) Can the proposed action reasonably be expected to adversely affect endangered or threatened species, their critical habitat, marine mammals, or other non-target species?

Response: Seven species of large whales that occur in Alaska are listed under the ESA including the following: the North Pacific right (*Eubalaena japonica*), bowhead (*Balaena mysticetus*), fin (*Balaenoptera physalus*), sei (*Balaenoptera borealis*), blue (*Balaena mysticetus*), humpback (*Megaptera novaengliae*), and sperm (*Physeter macrocephalus*) whales. None of these species are affected by the proposed action either individually or as part of a larger cumulative effect of the action on the environment.

The western population of Steller sea lions (*Eumetopias jubatus*), is the only pinniped species federally listed as endangered under the ESA found near St. Paul Island. Walrus Island is the only active Steller sea lion breeding ground on the Pribilof Islands. It is located approximately 12 km (7.5 miles) east of St. Paul Island. The use of Walrus Island as a breeding ground for Steller sea lions is reported intermittently throughout history. There are several periods in which Steller sea lions have abandoned the island as a breeding ground due to overexploitation and harassment. During these periods, sea lions used the island as a haul-out. Steller sea lions haul-out intermittently year round at Sea Lion Rock, Otter Island, Sea Lion Neck and Northeast Point. Data is unavailable on the certain numbers of Steller sea lions that haul-out on St. Paul Island proper. There are no designated Steller sea lion hauling grounds, rookeries, or critical habitat on St. Paul Island. If Steller sea lions are observed in the proposed action area, the work will cease as no takes of Steller sea lions will be authorized for the proposed action.

Northern fur seals are colonial breeding pinnipeds that exhibit strong site fidelity and currently breed on a few islands in the North Pacific Ocean and Bering Sea. Over 50 percent of the worldwide population of fur seals is found on the Pribilof Islands. Adult males arrive first and establish territories on the breeding rookeries. On the Pribilof Islands they arrive in descending order by age, beginning in early May. Adult territorial males fast while defending territories until mid-August. Sub-adult males are not territorial and will not typically remain at a particular resting site after being harassed, but instead may haul-out at another site or stay at sea.

NMFS designated the Pribilof Islands northern fur seal population depleted on June 17, 1988 because it declined to less than 50 percent of levels observed in the late 1950s and no compelling evidence suggested that the northern fur seal carrying capacity of the Bering Sea had changed substantially since the late 1950s.

The predicted direct effect on adult male northern fur seals may include changes in time spent in their normal behavioral activity. NMFS AKR estimates adult male fur seals may increase the time spent alert, moving, and in territorial defense. Adult male fur seals may also depart from land into the water or delay their arrival on land; all of these behaviors occur normally as a result of interactions among adult males. During May, adult males spend their time resting or alert defending their territory after spending the winter at sea.

NMFS AKR does not anticipate any negative indirect effects from incidental taking or the newly designed observation towers on northern fur seals. The towers and walkways are to be built in the exact or very near the locations of the current research structures, which have been in place for at least 50 years. Northern fur seals have strong site fidelity and have returned to breeding sites surrounding the research towers and walkways. The design of the replacement towers occurred in consultation with numerous biologists from the National Marine Mammal Laboratory (NMML) for approximately two years, and the new design may result in less incidental harassment of breeding and resting northern fur seals during the course of subsequent research activities (positive indirect effect). Territorial adult males are highly resistant to disturbance at the time of year NMFS AKR is planning for the proposed action. Little, if any, movement is expected by territorial adult males of northern fur seals.

During the spring and early summer, the site at haul-outs and rookeries will not be able to be avoided during the construction operations, and the disturbance of pinnipeds will likely occur. Mitigation and monitoring measures will be implemented by field crew personnel to exercise caution and minimize potential disturbance to the lowest level practicable while conducting rat eradication activities. The potential disturbance to pinnipeds would not be significant at this time as it will be short term, generally before and after biologically sensitive time periods (i.e., breeding, pup-rearing, molting).

The construction operations have the potential for flushing or stampede of pinnipeds at haul-out sites. If disturbed by field crew personnel, watercraft, and/or aircraft, hauled-out animals may move toward the water generally without risk of encountering significant hazards. In these circumstances, the risk of injury or death to hauled animals is very low. The risk of marine mammal injury, serious injury, or mortality associated with construction operations increases somewhat if disturbances occur during breeding season, as mothers and dependant pups could become separated if flushed. Also, adult animals may trample pups if disturbed, which could potentially result in the injury or death of pups. Cliffs and steep precipitous areas also have the potential for injuring pinnipeds flushed during operations, but pinnipeds in the project area only use beach areas at haul-outs in the proposed action area. Operations will not be conducted at places and times where breeding and dependent pups are present. Construction operations are scheduled after or at the very end of when the biologically sensitive time periods of pupping, breeding, rearing, dispersing, and molting is expected to occur. With monitoring and mitigation measures in place, NMFS believes it highly unlikely that the activities would result in the injury, serious injury, or mortality of pinnipeds.

Based on surveys of marine mammals conducted at St. George Island in previous years, NMFS believes that small numbers (relative to the population counts) of northern fur seals will be disturbed (in the form of moving away from the field crew personnel) by government workers that visit the various research sites during the construction operations. Due to the infrequency and small numbers affected, as well as the fact that any harassment is expected to be Level B (behavioral) and no injury, serious injury, or mortality is expected, NMFS believes these takes will have a negligible impact on the species or stocks under NMFS jurisdiction.

Operations by field crew personnel may result in incidental takes, by Level B harassment, of small numbers of marine mammals. Pinnipeds may behaviorally react from exposure to airborne noise and visual stimuli by the field crew personnel. As analyzed above, since the construction activities are planned to occur before and after breeding, rearing, and molting seasons, the proposed action is expected to have a negligible impact on the species' or stocks of marine mammals in the project area.

The risk of marine mammal injury (Level A harassment), serious injury, or mortality associated with construction operations increases somewhat if disturbances occur during breeding season, as it is possible that mothers and dependent pups could become separated. If separated pairs don't reunite fairly quickly, risks of mortality to pups (through starvation) may increase. Also, adult northern fur seals may trample pups if disturbed, which could potentially result in the injury, serious injury or death of pups. Injury, serious injury, or mortality due to stampeding or mother-pup separation is not anticipated during the construction operations. Since the activities will occur before and after the rookery season, the abundance of pinnipeds should be lower. Injuries or mortalities by stampedes due to field crew personnel approaches are not anticipated because animals are likely to be more spaced apart, thus when being flushed into the water, it is not likely that they would trample one another. However, to mitigate this risk, NMFS shall include time of year restrictions to limit the presence of field crew personnel activities to months that northern fur seals dependent pups are not present at the construction sites. Last, field crew personnel are to use great care approaching sites with pinnipeds and will leave as soon as possible to minimize effects. Because of the circumstances and the proposed IHA requirements discussed above, NMFS believes it highly unlikely that the activities would result in the injury, serious injury, or mortality of pinnipeds.

Many seabirds and sea ducks use the nearshore waters surrounding the Pribilof Islands during the winter, and only glaucous gulls (*Larus hyperboreus*) are regularly present during the winter and spring. Glaucous gulls are omnivorous during this time of year primarily feeding on offal and fish waste associated with fish processing operations on St. Paul. Glaucous gulls do not feed on St. Paul Island. Least auklets (*Aethia pusilla*) breed on St. Paul Island and are one of the most abundant seabirds in North America, with a total population of about nine million. This species breeds on the Aleutian Islands and the Pribilof Islands including various locations on St. Paul Island including within northern fur seal rookeries, and winters at sea near breeding sites. The proposed action construction period will overlap with the pre-laying period of least auklets breeding in the cobble and boulder habitat on Reef rookery. During the pre-laying period least auklets examine previously-used nesting sites and new sites. They may be displaced for short periods of time by construction activities; however the number and density of least auklets using the nearshore habitats at Reef rookery are unknown. The effect of short-term displacement from potential nest sites during the pre-laying period are unknown, as it is extremely difficult to study least auklet nesting behavior and success without some short-term displacement during the pre-laying and early egg-laying period. Some previously used nesting sites may be lost. NMFS AKR predicts least auklets may use the rock-filled foundations of the replacement towers and walkways as they have used newly placed harbor rip-rap on St. Paul and St. George Islands, and the net result would be an increase in potential nest sites. These seabird species are managed under the jurisdiction of the U.S. Fish and Wildlife Service.

The proposed action will not adversely affect endangered or threatened species because they are not present in the proposed action area. The incidental harassment of small numbers of adult and possibly sub-adult male northern fur seals will not adversely affect the individuals or eastern Pacific stock.

5) Are significant social or economic impacts interrelated with natural or physical environmental effects?

Response: The human environment on St. Paul Island (including other biological resources, water resources, historic and cultural resources, or human uses and values associated with the island) will not be significantly affected. St. Paul Island is a remote subsistence and commercial fishing community located in the southeast Bering Sea. There are approximately 450 residents on St. Paul Island according to the most recent census. Northern fur seals, Steller sea lions, halibut, reindeer and various sea ducks compromise the primary subsistence resources for St. Paul Island. Northern fur seals are not allowed to be harvested on land by Alaska Natives outside the harvest season described at 50 CFR 216.72. 50 CFR 216.72(c)(1) states that "no fur seal may be taken on the Pribilof Islands before June 23 of each year." Therefore, there will be no impact on subsistence use of northern fur seals. Commercial halibut fishing provides the majority of the non-governmental revenue on St. Paul Island.

The issuance of the IHA will allow for an extended construction season in the event that unforeseen delays occur during the winter. NMFS anticipates that a lengthened construction season will increase the probability of the contractor to complete their job in a single season in addition to increasing the duration or availability of local employment opportunities. Additional winter and spring employment will result in a positive effect on the local community. St. Paul Island has highly seasonal employment, depending on fishing effort for crab and halibut.

The proposed construction activities will not permanently change the physical environment. The natural or physical effects are so small that their relationship to social or economic impacts cannot be significant. NMFS finds there are no significant social or economic impacts interrelated with natural or physical environmental effects.

6) Are the effects on the quality of the human environment likely to be highly controversial?

Response: Beginning March 10, 2010 (75 FR 11121), NMFS' proposed incidental take authorization was open to public comment for 30 days. The effects of this action by NMFS and NMFS AKR on the quality of the human environment are not likely to be highly controversial. For several years, NMFS has issued IHA's for similar activities to scientific organizations and agencies, which has allowed NMFS to develop relatively standard mitigation and monitoring requirements for these types of actions, so rarely are more than one or two public comments received.

NMFS received two public comments on the proposed authorization. The Marine Mammal Commission (Commission) recommended that NMFS issue the IHA to NMFS AKR, provided that:

(1) the monitoring and mitigation activities proposed in NMFS' *Federal Register* notice are included in the authorization and are carried out as described; and
(2) field crews clear all construction-related debris (including debris from towers or walkways that have fallen down) from each site upon completion of construction activity and crews use bolts or other materials, rather than nails, during construction so that structures that become decrepit in the future do not become hazardous to animals (e.g., boards with nails sticking out).

The comments submitted will be addressed in the IHA notice of issuance published in the *Federal Register*. NMFS believes that the effects on the quality of the human environment are not likely to be highly controversial.

7) Can the proposed action reasonably be expected to result in substantial impacts to unique areas, such as historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers, essential fish habitat, or ecologically critical areas?

Response: NMFS is aware that the northern fur seal rookeries on St. Paul Island are a unique area, as it is part of the Seal Islands National Historic Landmark. In an EA and FONSI, NMFS AKR has analyzed the action, established appropriate monitoring and mitigation measures, and found that the action will not significantly impact the refuge resources. The Pribilof Islands are important for the hauling-out, molting, and pupping of pinnipeds, however, no major disruptions or physical changes will be made at the study sites and, therefore, NMFS does not anticipate any impacts to unique areas. The incidental harassment of small numbers of adult and possibly sub-adult male northern fur seals will not result in substantial impacts to unique areas.

8) Are the effects on the human environment likely to be highly uncertain or involve unique or unknown risks?

Response: NMFS has conducted marine mammal surveys at St. Paul Island in previous years with no unexpected outcomes. Information on the surveys for marine mammals are described and included in the proposed IHA's notice of receipt published in the *Federal Register*. The effects on the human environment have been analyzed and described in the EA. The effects on the human environment from the construction operations are not likely to be highly uncertain or involve unique or unknown risks. The response of small numbers of adult and possibly sub-adult male northern fur seals to incidental harassment is not likely to be highly uncertain or involve unique or unknown risks.

9) Is the proposed action related to other actions with individually insignificant, but cumulatively significant impacts?

Response: NMFS AKR's proposed action on St. Paul Island is conducted under cooperation with NMML with funding from NMFS. The NMFS action of funding the award to conduct the construction operations and NMFS' action of issuing a permit that authorizes takes (Level B harassment) of marine mammals incidental to the replacement and repair of northern fur seal observation towers and walkways are interrelated. NMFS AKR's construction

operations (the proposed action) and the connected issuance of an IHA are not expected to result in cumulatively significant impacts when considered in relation to other separate, yet insignificant actions.

NMFS' action, the issuance of an IHA to NMFS AKR, is directly related to NMFS' action of funding the construction operations. NMFS AKR is proposing to demolish, repair, and use select replacement of northern fur seal observation towers and walkways for research purposes. NMFS AKR's EA specifically analyzed the fact that NMFS AKR intends to obtain an IHA from NMFS in order to conduct the construction operations. The EA briefly examined the impact of the construction operations, other human activities, and NMFS AKR concluded that the impacts of the proposed action on St. Paul Island are expected to be no more than minor and short term.

NMFS has issued incidental take authorization for similar activities that may have resulted in the harassment of marine mammals, but they are dispersed both geographically and temporally, are short term in nature, and all use monitoring and mitigation measures to minimize impacts. NMFS does not anticipate any cumulatively significant impacts to pinnipeds.

10) Is the proposed action likely to adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural or historical resources?

Response: The incidental harassment of small numbers of adult and possibly sub-adult male northern fur seals will occur within the Seal Islands National Historic Landmark, but the landmark will not be adversely affected and no loss or destruction of scientific, cultural or historical resources will occur as the research observation towers and walkways are not part of the landmark. The northern fur seal rookeries on St. Paul Island are part of the Seal Islands National Historic Landmark designated in 1962. Many of the observation towers and walkways were built and had been used to facilitate northern fur seal research at the time of designation, but were not listed as contributing structures to the landmark. This project will be performed by field crew personnel, on foot and four-wheel drive vehicles during construction operations and will result in minor physical changes to the site and, therefore, NMFS anticipates no loss or destruction of significant scientific, cultural or historical resources.

There are not unique characteristics or historic sites that will be adversely affected. Adherence to existing laws and regulations will further ensure that the construction operations do not harm the resources. No further consultation is needed to ensure the full consideration of effects on historic properties as required by Section 106 of the National Historic Preservation Act. Additionally, NMFS must comply with Federal regulations relating to the protection of historic or archaeological sites.

11) Can the proposed action reasonably be expected to result in the introduction or spread of a nonindigenous species?

Response: NMFS is aware of no mechanism within this project description that would allow the introduction or spread of non-indigenous species, as the operations consist entirely of a

relatively small field crew. The goal of the proposed action is to provide safe access for fur seal researchers into the dense breeding aggregations of northern fur seals. NMFS does not expect the proposed action to result in the introduction or spread of a non-indigenous species.

12) Is the proposed action likely to establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration?

Response: This project has no unique aspects that would suggest it be a precedent for any future actions. To ensure compliance with statutory and regulatory standards, NMFS' actions under section 101(a)(5)(D) of the MMPA must be considered individually and be based on the best available scientific information and be specific to the circumstances. NMFS has issued many authorizations for construction activities, and this project has no unique aspects that would suggest it would be precedent for any future actions. The proposed action is not likely to establish a precedent for future actions with significant effects, nor does it represent a decision in principle about a future consideration.

13) Can the proposed action reasonably be expected to threaten a violation of Federal, State, or local law or requirements imposed for the protection of the environment?

Response: NMFS does not expect this action to violate any Federal, State, or local law, or requirements imposed for the protection of the environment.

14) Can the proposed action reasonably be expected to result in cumulative adverse effects that could have a substantial effect on the target species or non-target species?

Response: Cumulative effects refer to the impacts on the environment that result from a combination of past, existing, and reasonably foreseeable human activities. Causal agents of cumulative effects can include multiple effects, effects of activities in more than one locale, and recurring events. With the exception of subsistence hunting, research, occasional boat (commercial fishing) and air traffic, NMFS is aware of no activities occurring in the action area that may affect the marine mammal species addressed here. Northern fur seals are affected directly by marine debris through entanglement, directly and indirectly by commercial fishing, directly and indirectly by northern fur seal research, and directly and indirectly by subsistence harvests by Alaska Natives. Other cumulative effects may include climate change, anthropogenic contaminants, underwater and airborne anthropogenic noise exposure. It is unknown to what extent the known cumulative effects related to human activities are directly or indirectly related to the current decline in northern fur seals. It is known that stress from long-term cumulative sound exposures can result in physiological effects on reproduction, metabolism, general health and disease resistance in marine mammals. These effects are not expected to be incurred, however, due to the infrequency and short duration of the proposed construction operations as well as the implementation of required monitoring and mitigation measures. NMFS does not anticipate that the proposed action will result in cumulative adverse effects that could have a substantial effect on marine mammals or other species.

DETERMINATION

In view of the information presented in this document and the analysis contained in the supporting NMFS Environmental Assessment (EA) prepared for the issuance of an IHA for the taking of marine mammals by harassment during replacement and repair of northern fur seal observation towers and walkways on St. Paul Island, it is hereby determined that the issuance of the IHA for construction activities (EA Alternative 1) will not significantly impact the quality of the human environment as described above and in the EA. In addition, all beneficial and adverse impacts of the proposed action have been addressed to reach the conclusion of no significant impacts. Accordingly, preparation of an EIS or Supplemental EIS for this action is not necessary.

APR 16 2010

James H. Lecky
Director
Office of Protected Resources
National Marine Fisheries Service

Date