

**Biorka Island Dock Replacement
Protected Species Monthly Report
May 2019**

Prepared For:

NMFS Protected Resources Division

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June 10, 2019

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Attachments

- Attachment A: Marine Mammal Observation Record Forms**
- Attachment B: Marine Mammal Take Summary**

Introduction

The Federal Aviation Administration (FAA) is conducting a project to remove and replace the only dock and barge landing in Symonds Bay on Biorka Island near Sitka, Alaska in order to adequately maintain navigational and weather facilities located on the island.

The FAA was granted an Incidental Harassment Authorization (IHA) for the project by the National Marine Fisheries Service (NMFS) on October 25, 2017. The IHA was valid from May 1, 2018 to April 30, 2019, and work ran from May 2018 to December 2018. Due to weather conditions work was unable to be completed and the FAA requested a new IHA. On April 10, 2019, NMFS authorized a new IHA that is valid from May 1, 2019 through April 30, 2020. Authorized Level A and B take of marine mammals (different from the previously issued IHA) is summarized in Table 1.

Table 1. Authorized Takes of Marine Mammals

Species	Authorized Take	
	Level A	Level B
Harbor seal	20	220
Steller sea lion	3	60
Harbor porpoise	15	45
Killer Whale	0	24
Humpback whale	1	60
Minke whale	0	12

(Source: NMFS 2019)

In-water construction resumed on May 23, 2019. This monitoring report will be submitted to NMFS and U.S. Fish and Wildlife Service (USFWS) to meet the monthly monitoring and reporting requirements required by NMFS in the IHA issued to the FAA under the authority of Section 101 (a)(5)(D) of the Marine Mammal Protection Act (MMPA) and to deliver northern sea otters sighting information to USFWS.

The following report details protected species monitoring and mitigation during the 3 days of in-water work for the month of May 2019. For more information on monitoring methods, please see the June 2018 monitoring report for this project.

Environmental Conditions

Environmental conditions on the three days of monitoring varied (Table 2). Temperatures were between 45°F and 58°F. Visibility was generally excellent with one day of moderate visibility on May 31st. Weather was partly cloudy with one day of light rain/mist. Wind was light with an average speed of 6.5 mph with the highest wind speeds reaching 9.6 mph on May 31st. Water conditions in Symonds Bay and Sitka Sound were generally favorable during observation periods with the Beaufort Sea State staying at 1 (NOAA 2019).

Table 2. Environmental Condition During In-Water Work in May 2019

Date	Temperature Range (Fahrenheit)	Average Wind Speed (mph)	Visibility	Glare	Weather Condition	Beaufort Sea State
23-May	45-49	5.3	Excellent	10%	PC	1
28-May	50-58	7.9	Excellent	0%	PC	1
31-May	49-53	9.6	Moderate	0%	LR	1

Monitoring and Detection Results

Visual Detection

A summary of take is included below. Takes only occurred if the sighting happened during periods of in water work. A detailed log of sightings per day is located in Attachment A. The total number of sightings, extrapolated takes, and Level B takes per species for the month of May is in Table 3. Level B takes per day and per species is in Attachment B. No level A takes occurred.

Table 3. Total Level B Takes Per Species During the Biorka Island Dock Replacement In-Water Construction in May 2019 (no level A take occurred)

Species	Total Number of Sightings	Number of Level B Takes	Extrapolated Level B Takes	Total Number of Level B Takes
Humpback whale	0	0	0	0
Killer whale	0	0	0	0
Harbor porpoise	0	0	0	0
Harbor seal	10	3	2	5
Northern sea otter	22	0	0	0
Steller sea lion	0	0	0	0
Total	32	3	2	5

Pinniped Detections

Harbor seals

Harbor seals were sighted on one day of in-water work with a total of 10 individuals sighted. Only 3 individuals resulted in a Level B take, and there were 2 extrapolated Level B takes. Sightings were all of single individuals that were exhibiting looking behavior. The sex of the individuals was unable to be determined. No pups were sighted.

Other Marine Mammal Detections

Northern Sea otters

Twenty-two sea otters were sighted in May. Individuals were seen on all days that in-water work occurred in May; however, none of the sightings resulted in takes. Note that due to the distance from the work, no delays occurred. Groups ranged from 1 to 7 individuals and were determined to be foraging, resting, milling, playing, and travelling. The sex and age of individuals were unable to be positively determined.

Summary

Visual monitoring during May 2019 resulted in the sightings of a total of 25 individuals and a total of 5 Level B takes. Two species of marine mammals were positively identified: harbor seals and northern sea otters. No level A takes occurred.

Table 4 summarizes the total number of take that has occurred during construction to date on the project. Currently the project is on track for not exceeding the number of authorized take under the IHA.

**Table 4. Total Takes Per Species During the Biorka Island Dock Replacement
In-Water Construction in May 2019**

Species	Level A Authorized	Level B Authorized	Level A Exposures to Date	Level B Exposures to Date	Remaining Level B takes allowed
Humpback Whale	1	60	0	0	60
Killer Whale	0	24	0	0	24
Harbor Porpoise	15	45	0	0	45
Harbor Seal	20	220	0	5	215
Steller Sea Lion	3	60	0	0	60
Minke Whale*	0	12	0	0	12

Note: Take numbers do not include takes accumulated under the previously issued IHA.

References

National Marine Fisheries Service. 2019. Biorka Island Incidental Harassment Authorization. Accessed from <https://www.fisheries.noaa.gov/action/incidental-take-authorization-faa-biorka-island-dock-replacement-project-sitka-ak> on June 3, 2019.

National Oceanic and Atmospheric Administration (NOAA). 2019. National Weather Service: Biorka Island. Accessed from <https://w2.weather.gov/climate/getclimate.php?wfo=pajk> on June 3, 2019.

Attachment A

Laura Kaltenstein
Angela Bowers

MARINE MAMMAL OBSERVATION RECORD FORM

Project Name: Biorka Island Dock Replacement

Monitoring Location MMO 1 - 450m from work (S.E beach)
MMO 2 - 300m from work (N.W beach) Page 1 of 1
(Pier Location, Vessel based, Land Location, other)

Date: ~~May 30, 2019~~ May 23, 2019

Vessel Name: _____

Impact H piles scenario 5 Time Effort Initiated: 7:45-10:15
Vib sheets 6 sheets
Dock wave barrier Time Effort Completed: _____
Scenario 6

May 23rd, 2019

Sighting Data

Event Code	Sighting Number (1 or 1.1 if resight)	Time/Duration watching sighting (Start/End time if continuous)	WP # (every time a sighting is made)	Observer	Sighting cue	Species	Dist/ Dir to Animal (from Observer)	Dist to Pile (btwn animal & pile)	# of Animals Group Size (min/max/best) # of Calves	Relative Motion/and Behavior Code (see code sheet)	Const Type During Sighting	Mitigation used during sighting ?	Mitigation Type?	Visibility	% Glare	Weath Cond	Sea State and Wave Ht	Swell Dir	Behavior Change/ Response to Activity/Comments
	1	10:05	-	LK	V	SO	500 m or km	450 m or km	1 1 1 1 — calves	opening closing parallel none Behavior Code: <u>FO</u>	PRE (POST) SSV SSI V I PC DP ST NONE	Y (N)	DE SD	B P M G (E)	10%	PC	Light Mod Heavy	Nor S W or E	
		::					m or km	m or km	1 1 — calves	opening closing parallel none Behavior Code:	PRE POST SSV SSI V I PC DP ST NONE	Y N	DE SD	B P M G E			Light Mod Heavy	Nor S W or E	
	1	12:26-13:50	-	LK AB	V	SO	500 m or km	800 m or km	2 2 2 2 — calves	opening closing parallel none Behavior Code: <u>ML</u>	PRE POST SSV SSI V I PC DP ST NONE	Y (N)	DE SD	B P M G (E)	10%	PC	Light Mod Heavy	Nor S W or E	
	2	13:00	-	LK AB	V	SO	430 m or km	700 m or km	1 1 1 1 — calves	opening closing parallel none Behavior Code: <u>TP</u>	PRE POST SSV SSI V I PC DP ST NONE	Y (N)	DE SD	B P M G (E)	10%	PC	Light Mod Heavy	Nor S W or E	
		::					m or km	m or km	1 1 — calves	opening closing parallel none Behavior Code:	PRE POST SSV SSI V I PC DP ST NONE	Y N	DE SD	B P M G E			Light Mod Heavy	Nor S W or E	
		::					m or km	m or km	1 1 — calves	opening closing parallel none Behavior Code:	PRE POST SSV SSI V I PC DP ST NONE	Y N	DE SD	B P M G E			Light Mod Heavy	Nor S W or E	
		::					m or km	m or km	1 1 — calves	opening closing parallel none Behavior Code:	PRE POST SSV SSI V I PC DP ST NONE	Y N	DE SD	B P M G E			Light Mod Heavy	Nor S W or E	

Sighting # = chronological number of sightings, if resight of same animal, then 1.1, 1.2, etc. WP (Waypoint) = GPS recording of lat/long, time/date stamp. Critical for vessel observers.

P.M. shift - vib 6 sheets, vib used on and off 13:20-1:20

LAURA KALTENSTEIN
KRISANNE RICE

VIB ON 18:55 - 19:02

MARINE MAMMAL OBSERVATION RECORD FORM

Project Name: Biorka Island Dock Replacement

Monitoring Location MMO 1 350m N of work
MMO 2 350m S of work
(Pier Location, Vessel Based, Land Location, other)

Page 1 of 1

Date: May 28, 2019

Vessel Name: Vib 2 sheets scenario 6

Time Effort Initiated: 18:20

Time Effort Completed: 19:35

Sighting Data

Event Code	Sighting Number (1 or 1.1 if resight)	Time/Duration watching sighting (Start/End time if continuous)	WP # (every time a sighting is made)	Observer	Sighting Cue	Species	Dist/Dx to Animal (from Observer)	Dist to Pile (between animal & pile)	No of Animals Group Size (min/max/best) # of Calves	Relative Motion/and Behavior Code (see code sheet)	Const Type During Sighting	Mitigation used during sighting	Mitigation Type?	Visibility	% Glare	Weather Cond	Sea State and Wave Ht	Swell Dir	Behavior Change/Response to Activity/Comments
4	1	18:20 to 19:35	✓	KR	✓	SO	150m	500m or km	3 3 3 — calves	PL FO opening closing parallel none Behavior Code	FRE POST SSV SST V T PC EP ST NONE	Y (N)	DE SD	B M P G E	0%	PC	Light Mod Heavy	No S W or E	
4	2	18:45 to 19:35	✓	KR	✓	SO	200m	400m	1 1 1 1 — calves	M1 opening closing parallel none Behavior Code	FRE POST SSV SST V T PC EP ST NONE	Y (N)	DE SD	B M P G E	0%	PC	Light Mod Heavy	No S W or E	
4	3	18:20 to 19:35	✓	LK	✓	SO	700m	400m	3 5 4 — calves	M1 opening closing parallel none Behavior Code	FRE POST SSV SST V T PC EP ST NONE	Y (N)	DE SD	B M P G E	0%	PC	Light Mod Heavy	No S W or E	raft, resting
		:					m or km	m or km	1 1 — calves	opening closing parallel none Behavior Code	FRE POST SSV SST V T PC EP ST NONE	Y N	DE SD	B M P G E			Light Mod Heavy	No S W or F	
		:					m or km	m or km	1 1 — calves	opening closing parallel none Behavior Code	FRE POST SSV SST V T PC EP ST NONE	Y N	DE SD	B M P G E			Light Mod Heavy	No S W or E	
		:					m or km	m or km	1 1 — calves	opening closing parallel none Behavior Code	FRE POST SSV SST V T PC EP ST NONE	Y N	DE SD	B M P G E			Light Mod Heavy	No S W or E	
		:					m or km	m or km	1 1 — calves	opening closing parallel none Behavior Code	FRE POST SSV SST V T PC EP ST NONE	Y N	DE SD	B M P G E			Light Mod Heavy	No S W or E	

Sighting #: chronological number of sightings, if resight of same animal, then 1.1, 1.2, etc. WP (Waypoint) = GPS recording of lat/long, time/date stamp. Critical for vessel observers

Laura Kaltenstein
Krisanne Rice

Vib used 10:30-10:32 17:30-17:32
10:55-10:56
13:00-13:35
14:15-15:15
15:50-15:51

Project Name: Biorka Island Dock Replacement

MARINE MAMMAL OBSERVATION RECORD FORM

MMO 1 100m From work
Monitoring Location MMO 2 350m From work
(Pier Location, Vessel Based, Land Location, Other)
Removal and installation

Page 1 of 1

Date: MAY 31 2019

Vessel Name: 3 temporary pilings with vib

Time Effort Initiated: 10:00am

Time Effort Completed: 18:00pm

Sighting Data

Vent Code	Sighting Number (1 or 1.1 if resight)	Time/Duration watching sighting (Start/End time if continuous)	WP # (every time a sighting is made)	Observer	Sighting cue	Species	Dist/Dir to Animal (from Observer)	Dist to Pile (b/w animal & pile)	No of Animals Group Size (min/max/best) # of Calves	Relative Motion/and Behavior Code (see code sheet)	Const Type During Sighting	Mitigation used during sighting?	Mitigation Type?	Visibility	% Glare	Weather Cond	Sea State and Wave Ht	Swell Dir	Behavior Change/Response to Activity/Comments
S	1	10:30 to 4:00	/	LK KR	V	SO	600m or km	700m or km	7 - calves	PL MI opening closing parallel none Behavior Code	FRE POST SSV SSI V I PC EP ST NONE	Y (N)	DE SD	B ^h P ^h G E	0%	MIST	Light Med Heavy	No S Wave	
S	2	10:42	/	LK KR	V	HS	400m or km	450m or km	1111 - calves	LO opening closing parallel none Behavior Code	FRE POST SSV SSI V I PC EP ST NONE	Y (N)	DE SD	B ^h P ^h G E	0%	MIST	Light Med Heavy	No S Wave	
S	3	11:33	/	LK KR	V	SO	450m or km	400m or km	22, 2 - calves	MI opening closing parallel none Behavior Code	FRE POST SSV SSI V I PC EP ST NONE	Y (N)	DE SD	B ^h P ^h G E	0%	MIST	Light Med Heavy	No S Wave	
S	4	12:30	/	LK KR	V	SP	300m or km	300m or km	1111 - calves	FO opening closing parallel none Behavior Code	FRE POST SSV SSI V I PC EP ST NONE	Y (N)	DE SD	B ^h P ^h G E	0%	MIST	Light Med Heavy	No S Wave	
S	5	14:12	/	LK	V	HS	200m or km	80m or km	1111 - calves	LO opening closing parallel none Behavior Code	FRE POST SSV SSI V I PC EP ST NONE	Y (N)	DE SD	B ^h P ^h G E	0%	MIST	Light Med Heavy	No S Wave	
S	6	17:10	/	KR	V	HS	50m or km	450m or km	1111 - calves	LO opening closing parallel none Behavior Code	FRE POST SSV SSI V I PC EP ST NONE	Y (N)	DE SD	B ^h P ^h G E	0%	MIST	Light Med Heavy	No S Wave	
							m or km	m or km	1 - calves	opening closing parallel none Behavior Code	FRE POST SSV SSI V I PC EP ST NONE	Y (N)	DE SD	B ^h P ^h G E			Light Med Heavy	No S Wave	

Sighting #: chronological number of sightings, if resight of same animal, then 1.1, 1.2, etc. WP (Waypoint) = GPS recording of lat/long, time/date stamp. Critical for vessel observers

May 30 report should have been dated 23rd

Attachment B



Project: Biorke Island, Dock Replacement
Owner: Federal Aviation Administration
Engineer: R&M Consultants, Inc.
Contractor: Parsons
Subcontractor: Turnagain Marine Construction

Protected Species Observers:
 Laura Kallenstein
 Krisanne Rice
 Angela Bowers

MMO Exposure Summary

Species	Level A Authorized	Level B Authorized	Level A Exposures to Date	Level B Exposures to Date	Remaining Level B takes allowed
Humpback Whale	1	60	0	0	60
Killer Whale	0	24	0	0	24
Harbor Porpoise	15	45	0	0	45
Harbor Seal	20	220	0	5	215
Minke Whale	0	12	0	0	12
Steller Sea Lion	3	60	0	0	60

Number of B takes By day

Species	5/1/18	5/2/18	5/3/18	5/4/18	5/5/18	5/6/18	5/7/18	5/8/18	5/9/18	5/10/18	5/11/18	5/12/18	5/13/18	5/14/18	5/15/18	5/16/18	5/17/18	5/18/18	5/19/18	5/20/18	5/21/18	5/22/18	5/23/18	5/24/18	5/25/18	5/26/18	5/27/18	5/28/18	5/29/18	5/30/18	5/31/18	Extrapolated Takes	Monthly Total
Humpback Whale	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Killer Whale	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Harbor Porpoise	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Harbor Seal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	5
Otter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Steller Sea Lion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minke Whale	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Species	6/1/18	6/2/18	6/3/18	6/4/18	6/5/18	6/6/18	6/7/18	6/8/18	6/9/18	6/10/18	6/11/18	6/12/18	6/13/18	6/14/18	6/15/18	6/16/18	6/17/18	6/18/18	6/19/18	6/20/18	6/21/18	6/22/18	6/23/18	6/24/18	6/25/18	6/26/18	6/27/18	6/28/18	6/29/18	6/30/18	6/31/18	Extrapolated Takes	Monthly Total
Humpback Whale	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Killer Whale	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Harbor Porpoise	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Harbor Seal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Otter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minke Whale	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Steller Sea Lion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Summary: