

**Duck Point Development II, LLC
Hoonah Berth II Project
Protected Species Monthly Report
June 2019**

Prepared For:

NMFS Protected Resources Division

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- Attachment B: Marine Mammal Take Summary

Introduction

Duck Point Development II, LLC (DPD) is constructing a second cruise ship berth and a small-craft lightering float at Cannery Point (Icy Strait Point) on Chichagof Island near Hoonah, Alaska in order to accommodate more and larger cruise ships.

DPD was granted an Incidental Harassment Authorization (IHA) for the project by the National Marine Fisheries Service (NMFS) on June 3, 2019. The IHA was valid from June 3, 2019 to June 2, 2020. NMFS granted Level A and B harassment of a small number of minke whales (*Balaenoptera acutorostrum*), humpback whales (*Megaptera novaeangliae*), gray whales (*Eschrichtius robustus*), killer whales (*Orcinus orca*), Pacific white-sided dolphin (*Lagenorhynchus obliquidens*), Dall's porpoise (*Phocoenoides dalli*), harbor porpoises (*Phocoena phocoena*), harbor seals (*Phoca vitulina*), and Steller sea lions (*Eumetopias jubatus*) (Table 1). The takes granted for this project were generated based upon stock assessments completed by NMFS, direct consultation with NMFS, and observations from the first berth that was installed at Icy Strait Point. Authorized Level A and B take of marine mammals is summarized in Table 1.

Table 1. Authorized Takes of Marine Mammals

Species	Authorized Take	
	Level A	Level B
Minke whale	0	9
Humpback whale	0	434
Gray whale	0	3
Killer Whale	0	570
Pacific White-Sided Dolphin	0	164
Dall's Porpoise	0	1,038
Harbor Porpoise	32	1,992
Harbor Seal	16	156
Steller Sea Lion	0	559
Northern Sea Otter	0	0

(Source: NMFS 2019)

In-water construction on the small-craft lightering float began in June 22, 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 DPD 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 2 days of in-water work (vibratory hammer, stabbing and deadpull method) for the month of June 2019.

Project Overview and Location

The program was conducted in Port Frederick and Icy Strait near Hoonah, Alaska at approximately 58.1351° N, 135.4506° W (Figure 1).



Figure 3. Duck Point Development, LLC Hoonah Berth II Project Location

Table 2. Level A and Level B Monitoring Zones

Source	Shutdown Zones in Meters (<i>monitoring zone, if different, in meters</i>)					Level B Monitoring Zones (m)
	Low-Frequency Cetaceans (humpback whale, gray whale, minke whale)	Mid-Frequency Cetaceans (killer whale, Pacific white-sided dolphin)	High-Frequency Cetaceans (Dall’s porpoise, harbor porpoise)	Phocid (harbor seal)	Otariid (sea lion)	
In-Water Construction Activities*						
Barge movements, pile positioning, sound	10	10	10	10	10	N/A
Vibratory Pile Driving/Removal						
24-inch steel installation	25	10	25	10	10	6,215
30-inch steel temporary installation	25	10	25	10	10	6,215
30-inch steel removal	25	10	25	10	10	6,215
30-inch steel permanent installation	25	10	25	10	10	6,215
36-inch steel permanent installation	25	10	50	25	10	16,345
42-inch steel permanent installation	50	10	50	25	10	16,345
Impact Pile Driving						
36-inch steel permanent installation	1,000	50	100 (1,200)	50 (525)	50	3,745
42-inch steel permanent installation	750	50	100 (900)	50 (400)	50	3,745
Socketed Pile Installation						
24-inch steel permanent installation	25	10	50	15	10	12,025
30-inch steel temporary installation	25	10	50	15	10	12,025
Rock Anchor Installation						
8-inch anchor permanent installation	25	10	25	10	10	12,025
33-inch anchor permanent installation	100	10	100	50	10	12,025

Mitigation and Monitoring Methods

The Protected Species Observer (PSO) monitoring guidelines followed the mitigation measures detailed in the IHA granted by NMFS. The monitoring and mitigation protocols were established in order to minimize impacts to marine mammals in the vicinity of the dock replacement project. Visual observations allowed for the adherence of the shutdown areas and collection of data for use in future activities. All data collected by PSOs are located in Attachment A.

Visual Monitoring Methodology

Three on-site PSOs scanned for marine mammals, recorded and reported sightings, and implemented mitigation actions (shut downs) in accordance with the IHA throughout the month. A 30-minute watch prior to the start of and at the conclusion of any in water work, soft start procedures, and a consistent watch during all in water work occurred. The PSOs were located with a clear view of the action areas and had a full view of Port Frederick and Icy Strait (Figure 2). On days where visibility was reduced takes were extrapolated.



Figure 4. Protected Species Observers Locations During Monitoring (Source: NMFS 2019).

The PSOs were equipped with a VHF radio, binoculars, a rangefinder, and GPS unit. The head observer also was equipped with a cell phone to communicate with the construction superintendent. Guidelines for observers to mitigate for fatigue were closely followed. If a marine mammal was sighted, the

observer would identify and record the species. If the marine mammal appeared to be likely to enter a shutdown area, the superintendent was notified and in water work was halted and delayed until the marine mammal left the area or 15 minutes (pinnipeds) and 30 minutes (cetaceans) had passed after the last sighting within or near the action area.

The PSOs recorded the following information for each protected species observation:

- Species, date, and time for each sighting event.
- Number of animals per sighting event (adults/juveniles/calves).
- Primary, and if observed, secondary behaviors of the marine mammal.
- Geographic coordinates for the observed animals.
- Time of the most recent pile-driving activity or other project activity prior to sighting.
- Environmental conditions (i.e. sea state, weather conditions, visibility, lighting conditions, etc.).

When a protected species was observed, distance estimates were made using a rangefinder, the naked eye, and by relating the animal's proximity to an object at a known distance. Species and sex were determined, when possible, by observing anatomical features and behaviors. Identifications were confirmed and recorded.

Based upon the location, timeframe, behavior, and tracking movement observers were able to positively determine if an individual was being re-sighted. If an individual was re-sighted, a note was made on the sighting form to ensure that additional takes or sightings were not counted. If it could not be positively determined whether it was the same individual, the individual was counted as a new sighting and an additional take, if appropriate.

Environmental Conditions

Environmental conditions on the two days of monitoring varied (Table 3). Temperatures were between 49°F and 64°F. Visibility was generally good with weather and visibility varying on June 22. Weather was partly cloudy and overcast with periods of light rain and fog. Wind was generally light. Water conditions in Port Frederick and Icy Strait were generally favorable during observation periods with the Beaufort Sea State staying at 1 (NOAA 2019).

Table 3. Environmental Condition During In-Water Work in June 2019

Date	Temperature Range (Fahrenheit)	Average Wind Speed (mph)	Visibility	Glare	Weather Condition	Beaufort Sea State
22-June	52-59	10.8	Poor-Excellent	10%	OC/PC/R/F/L	1
23-June	49-64	6.3	Excellent	0%	OC/PC	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 and Level B takes per species for the month of June is in Table 4. Level B takes per day and per species is in Attachment B. No level A takes occurred.

Table 4. Total Level B Takes Per Species During the DPD Hoonah Berth II Project In-Water Construction in June 2019 (no level A take occurred)

Species	Total Number of Sightings	Number of Level B Takes	Extrapolated Level B Takes	Total Number Level B Takes
Minke whale	0	0	0	0
Humpback whale	0	0	0	0
Gray whale	0	0	0	0
Killer Whale	0	0	0	0
Pacific White-Sided Dolphin	0	0	0	0
Dall's Porpoise	0	0	0	0
Dall's Porpoise	0	0	0	0
Harbor Porpoise	4	0	0	0
Harbor Seal	5	0	0	0
Steller Sea Lion	3	3	0	3
Northern Sea Otter	10	0	0	0
Total	22	3	0	3

Cetacean Detections

Harbor porpoise

Harbor porpoise were sighted on one day of in-water work. None of the 4 individuals that were sighted were a Level B take, and there were no extrapolated Level B takes. Sightings were of a single individual, and a group of 3 exhibiting traveling, swimming, and milling behaviors. The sex of the individuals was unable to be determined. No calves were sighted.

Pinniped Detections

Harbor seals

Harbor seals were sighted both days of in-water work with a total of 5 individuals sighted. No sightings resulted in a Level B take, and there were no extrapolated Level B takes. Sightings were all of single individuals that were exhibiting looking, sinking, swimming, and spyhopping behaviors. The sex of the individuals was unable to be determined. No pups were sighted.

Steller sea lions

Three Steller sea lions were sighted on June 22, 2019. All three individuals were sighted alone and resulted in a Level B take, there were no extrapolated takes. The individuals were spyhopping and traveling. The sex of the individuals was unable to be determined. No pups were sighted.

Other Marine Mammal Detections

Northern sea otters

Ten sea otters were sighted in June. Individuals were seen on all days that in-water work occurred in June; however, none of the sightings resulted in takes. Note that due to the distance from the work, no shutdown were needed or occurred. Groups ranged from 1 to 2 individuals and were determined to be foraging, milling, and suspected mating. The sex and age of individuals were unable to be positively determined.

Summary

Visual monitoring during June 2019 resulted in the sightings of a total of 22 individuals and a total of 3 Level B takes. Four species of marine mammals were positively identified: harbor porpoise, harbor seals, Steller sea lions, and northern sea otters. No level A takes occurred.

Table 5 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 5. Total Takes Per Species During the DPD Berth II Project
In-Water Construction Through June 2019**

Species	Level A Authorized	Level B Authorized	Level A Exposures to Date	Level B Exposures to Date	Remaining Level B takes allowed
Minke Whale	0	9	0	0	9
Humpback Whale	0	434	0	0	434
Gray Whale	0	3	0	0	3
Killer Whale	0	570	0	0	570
Pacific White-Sided Dolphin	0	164	0	0	164
Dall's Porpoise	0	1,038	0	0	1,038
Harbor Porpoise	32	1,992	0	0	1,992
Harbor Seal	16	156	0	0	156
Steller Sea Lion	0	559	0	3	556
Northern Sea Otter	0	0	0	0	0

References

- National Marine Fisheries Service. 2019. Duck Point Development, LLC. Incidental Harassment Authorization. Accessed from <https://www.fisheries.noaa.gov/action/incidental-take-authorization-pile-driving-and-removal-activities-during-construction-cruise> June 26, 2019.
- National Oceanic and Atmospheric Administration (NOAA). 2019. National Weather Service: Hoonah, Alaska. Accessed from <https://w2.weather.gov/climate/getclimate.php?wfo=pajkon> June 26, 2019.

Attachment A

MARINE MAMMAL OBSERVATION RECORD

Project Name: Hbonah

Monitoring Location: Cannery

Date: JUNE 27 2019

Time Effort Initiated: 07:30

Time Effort Completed: 16:00

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
10:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
11:15	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	1	08:15	Grid N or S W or E	500m	LK	BL BO BR DF SA OTHER	SO	Min: 1 Max: 1 Best: 1	FO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	not exposed due to distance
E ON PRE/POST CON S M OR E OFF	2	09:05	Grid N or S W or E	500m	LK	BL BO BR DF SA OTHER	SO	Min: 1 Max: 1 Best: 1	FO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	
E ON PRE/POST CON S M OR E OFF	3	15:10	Grid N or S W or E	100m	LK	BL BO BR DF SA OTHER	HS	Min: 1 Max: 1 Best: 1	LO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: Hoonah
Monitoring Location: Long Island
Date: 6/22
Time Effort Initiated: 7:30
Time Effort Completed: 1600
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Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
7:30	B-P-M-G-E	30 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
10:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
11:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
12:30	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	1	11:40	Grid N or S W or E	3,100m	Jeff Sato	BL BO BR DF SA OTHER	Hsea	Min: 1 Max: Best: 1	sw(E)	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	just top of head visible
E ON PRE/POST CON S M OR E OFF	2	11:45	Grid N or S W or E	3,500m	Jeff Sato	BL BO BR DF SA OTHER	Hsea	Min: 1 Max: Best: 1	SP	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: Hoonah

Monitoring Location: vessel

Date: 6/22/2019

Time Effort Initiated: 0730

Time Effort Completed: 1400

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Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:30	B-P-M-G-E	40%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
10:20	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON M OR E OFF	1	08:09 08:20	Grid N or S W or E	.7 NM 1,300m	EH	BL BO BR DF SA OTHER	SO	Min: 2 Max: 2 Best: 2	MI	SSV SSI V DR I DP ST' OWC NOWC / NONE	SS/BC DE SD None	N	suspected mating
E ON PRE/POST CON M OR E OFF	2	08:22 08:24	Grid N or S W or E	6,000m	EH	BL BO BR DF SA OTHER	SD	Min: 1 Max: 1 Best: 1	FO	SSV SSI V DR I DP ST' OWC NOWC / NONE	SS/BC DE SD None	N	
E ON PRE/POST CON M OR E OFF	3	09:03 :	Grid N or S W or E	3,000m	EH	BL BO BR DF SA OTHER	STSL	Min: 1 Max: 1 Best: 1	SP	SSV SSI V DR I DP ST' OWC NOWC / NONE	SS/BC DE SD None	Y	
E ON PRE/POST CON M OR E OFF	4	09:09 09:10	Grid N or S W or E	1,000m	EH	BL BO BR DF SA OTHER	STSL	Min: 1 Max: 1 Best: 1	TR	SSV SSI V DR I DP ST' OWC NOWC / NONE	SS/BC DE SD None	Y	
E ON PRE/POST CON M OR E OFF	5	09:23 09:26	Grid N or S W or E	3,000m	EH	BL BO BR DF SA OTHER	HAPD	Min: 2 Max: 4 Best: 3	SW/MI	SSV SSI V DR I DP ST' OWC NOWC / NONE	SS/BC DE SD None	N	
E ON PRE/POST CON M OR E OFF	6	09:28 :	Grid N or S W or E	1,500m	EH	BL BO BR DF SA OTHER	HSEA	Min: 1 Max: 1 Best: 1	LO/SI	SSV SSI V DR I DP ST' OWC NOWC / NONE	SS/BC DE SD None	N	
E ON PRE/POST CON M OR E OFF	7	09:33 :	Grid N or S W or E	1,000m	EH	BL BO BR DF SA OTHER	SO	Min: 2 Max: 2 Best: 2	FO	SSV SSI V DR I DP ST' OWC NOWC / NONE	SS/BC DE SD None	N	
E ON PRE/POST CON M OR E OFF	8	09:52 :	Grid N or S W or E	1,500m	EH	BL BO BR DF SA OTHER	STSL	Min: 1 Max: 1 Best: 1	TR (w)	SSV SSI V DR I DP ST' OWC NOWC / NONE	SS/BC DE SD None	Y	

MARINE MAMMAL OBSERVATION RECORD

Project Name: Honah

Monitoring Location: vessel

Date: 06/22/2019

Time Effort Initiated: 0730

Time Effort Completed: 1600

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Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
0730	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	9	10:45 10:47	Grid N or S W or E	5,000m	EVA	BL BO BR DF OTHER	HAPD	Min: 1 Max: 1 Best: 1	TR (S)	SSV SSI V DR I DP ST' OWC NOWC / NONE	SS/BC DE SD None	N	
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST' OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST' OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST' OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST' OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST' OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST' OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST' OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: Hoonah

Monitoring Location: Cannery

Date: June 23 2019

Time Effort Initiated: 07:30 - 14:00

Time Effort Completed: 15:30 - 2000

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:30	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: Hoonah

Monitoring Location: Long Island

Date: 6/23

Time Effort Initiated: 7:30 | 1530

Time Effort Completed: 2000 | 1400 | 2000

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
7:30	B-P-M-G-E	10 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
10:30	B-P-M-G-E	10 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
15:30	B-P-M-G-E	10 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST' OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST' OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST' OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST' OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST' OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST' OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST' OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST' OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: Hoonah

Monitoring Location: vessel

Date: 6/23/2019

Time Effort Initiated: 0730 / 1530

Time Effort Completed: 1400 / 2600

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:30	B-P-M-G-E	20%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	1	08:21	Grid N or S W or E	1,700m	EH	BL BO BR DF SA OTHER	SO	Min: 1 Max: 1 Best: 1	FO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	
E ON PRE/POST CON S M OR E OFF	2	08:44	Grid N or S W or E	3,000m	EH	BL BO BR DF SA OTHER	HSEA	Min: 1 Max: 1 Best: 1	LO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	
E ON PRE/POST CON S M OR E OFF	3	09:58	Grid N or S W or E	3,000m	EH	BL BO BR DF SA OTHER	SO	Min: 1 Max: 1 Best: 1	FO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	
E ON PRE/POST CON S M OR E OFF	4	10:31	Grid N or S W or E	1,000	EH	BL BO BR DF SA OTHER	SO	Min: 1 Max: 1 Best: 1	FO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	
E ON PRE/POST CON S M OR E OFF	:	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF	:	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF	:	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF	:	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:		SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

Attachment B

Project: Hoonah Berth II	Protected Species Observers:	Laura Kaltenstein
Owner: Duck Point Development, LLC		Emerald Hagy
Contractor: Turnagain Marine Construction		Jeff Sato
		Jerry King
		Kate McWilliams

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
Minke Whale	0	9	0	0	9
Humpback Whale	0	434	0	0	434
Gray Whale	0	3	0	0	3
Killer Whale	0	570	0	0	570
Pacific White-Sided Dolphin	0	164	0	0	164
Dall's Porpoise	0	1,038	0	0	1,038
Harbor Porpoise	32	1,992	0	0	1,992
Harbor Seal	16	156	0	0	156
Steller Sea Lion	0	559	0	3	556
Northern Sea Otter	0	0	0	0	0

Number of B takes By day	
1	1
2	1
3	1
4	1
5	1
6	1
7	1
8	1
9	1
10	1
11	1
12	1
13	1
14	1
15	1
16	1
17	1
18	1
19	1
20	1
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88	1
89	1
90	1
91	1
92	1
93	1
94	1
95	1
96	1
97	1
98	1
99	1
100	1

[illegible]