

# Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters: 2013-2014

## Final Report



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**Cover Photo:** Male California (*Zalophus californianus*) and Steller (*Eumetopias jubatus*) sea lions hauled out on submarines at Delta Pier, NBK Bangor, photographed by A. Balla-Holden. Note: Male Steller sea lion “102Y” was branded as a pup at St. George Reef near Crescent City, CA.

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<b>14. ABSTRACT</b> <p>This report summarizes information from 24 U.S. Navy-funded aerial surveys of pinniped haulout sites in the inland waters of Washington State conducted between March 2013 and February 2014 by Washington Department of Fish and Wildlife. These aerial surveys represent the first pinniped assessments to be performed in the region of activity over all four seasons and provide much needed information about seasonal variation of harbor seal (<i>Phoca vitulina</i>), California sea lion (<i>Zalophus californianus</i>) and Steller sea lion (<i>Eumetopias jubatus</i>) distribution and abundance in this area. Marine mammal species recorded during aerial surveys included harbor seal, northern elephant seal (<i>Mirounga angustirostris</i>), Steller sea lion, California sea lion, gray whale (<i>Eschrichtius robustus</i>), and killer whale (<i>Orcinus orca</i>). Harbor seals are the most abundant pinniped and present year-round in the study area. Maximum counts of harbor seals occurred during July and August aerial surveys. The harbor seal population in inland waters of Washington was estimated at 14,980 seals in July and 15,802 in August 2013. These estimates coincide with the annual pupping and molt cycles for harbor seals in the inland waters of Washington when maximum numbers of seals are expected to be hauled out. During fall, winter and spring surveys, counts of seals on haulout site were substantially lower, with the majority of the harbor seal population not hauling out and in the water. The highest abundance of harbor seals at Navy facilities was recorded on logbooms adjacent to NAVSTA Everett. Steller sea lions are present in the study area year round with maximum counts recorded at Navy facilities during November aerial surveys when 30 and 32 Steller sea lions were hauled on floats in Clam Bay adjacent to the Navy's Manchester Fuel Depot. Only a small number of Steller sea lions (1-3 animals) were recorded using the port security barriers at NBK Bremerton and NAVSTA Everett. Craven Rock on the east side of Marrowstone Island was another haulout used consistently during aerial survey windows. No Steller</p>			

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## Acronyms and Abbreviations

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ft	foot/feet
NAVMAG	Naval Magazine
NAVSTA	Naval Station
NBK	Naval Base Kitsap
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NTR	Navy Technical Representative
NWR	Northwest Region
SAR	Stock Assessment Report
TO	Task Order
U.S.	United States
WDFW	Washington Department of Fish and Wildlife
Zc	<i>Zalophus californianus</i> (California sea lion)

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## 1. Introduction

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The Washington Department of Fish and Wildlife (WDFW) conducted United States (U.S.) Navy-funded aerial surveys of pinniped haulout sites in the inland waters of Washington State. Aerial surveys conducted under this Task Order (TO) represent the first pinniped assessments to be performed in the region of activity (**Figure 1**) over all four seasons, and therefore, will provide much needed information about seasonal variation of harbor seal (*Phoca vitulina*), California sea lion (*Zalophus californianus*) and Steller sea lion (*Eumetopias jubatus*) distribution and abundance in the inland waters of Washington State.

Objectives of this TO were to conduct aerial surveys of the waters from the Strait of Juan de Fuca to Puget Sound (**Figure 1**) in order to 1) provide estimates of seasonal abundance for seals and sea lions; 2) identify seasonal distribution patterns for seals and sea lions; 3) collect data to determine seal and sea lion densities; and 4) provide harbor seal abundance data needed by National Marine Fisheries Service (NMFS) to prepare a Stock Assessment Report (SAR) for the Washington Inland Waters Stock of harbor seal. Additionally, in 2000 the WDFW published an atlas depicting pinniped haulouts for these waters (Jeffries et al. 2000), which has not been updated in 13 years, and this atlas will be revised as part of this TO.

The NMFS Northwest Region (NMFS NWR) has partially funded the current effort by supporting summer-only aerial surveys covering U.S. waters of the Strait of Juan de Fuca (Cape Flattery to Port Angeles) as well as the San Juan Islands. This collaborative approach between the U.S. Navy and NMFS will allow NMFS to update the SAR for the Pacific harbor seal (Washington Inland Waters Stock). The current SAR is derived from population estimates from 1999, and abundance information from current surveys will provide NMFS with required data to revise this outdated stock assessment. The following is a summary of aerial survey activities conducted by WDFW between March 2013 and February 2014 under this TO.

## 2. Methods

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Aerial surveys were conducted in a Cessna 206 chartered from Rite Bros. Aviation in Port Angeles, Washington. Surveys were flown at an altitude of 600 to 800 feet (ft). Surveys were flown during low tide windows when maximum numbers of harbor seals were expected to be hauled out (Jeffries et al. 2003). For aerial surveys, the flight crew consisted of a pilot (Jeff Well, Rite Bros. Aviation in Port Angeles, Washington) in the left front, a primary observer/photographer in the right front, and a secondary observer/data recorder in the right rear.

The NAVFAC Navy Technical Representative (NTR) was provided a 7-day advance notice with specific details to be communicated with the 24-hour Command Center of the survey schedule and plans including dates, times, aircraft tail number, aircraft description, and flight crew contact information. Aerial surveys covered all haulout sites in the study region (**Figure 1**) and are described in Jeffries et al. (2000) and correspond to atlas regions 7, 8, 9, and 10. Specifically, haulout sites in Washington State were surveyed in the following atlas regions:

- Region 7: Strait of Juan de Fuca-East (east of Port Angeles to Whidbey Island), (includes Naval Magazine [NAVMAG] Indian Island)

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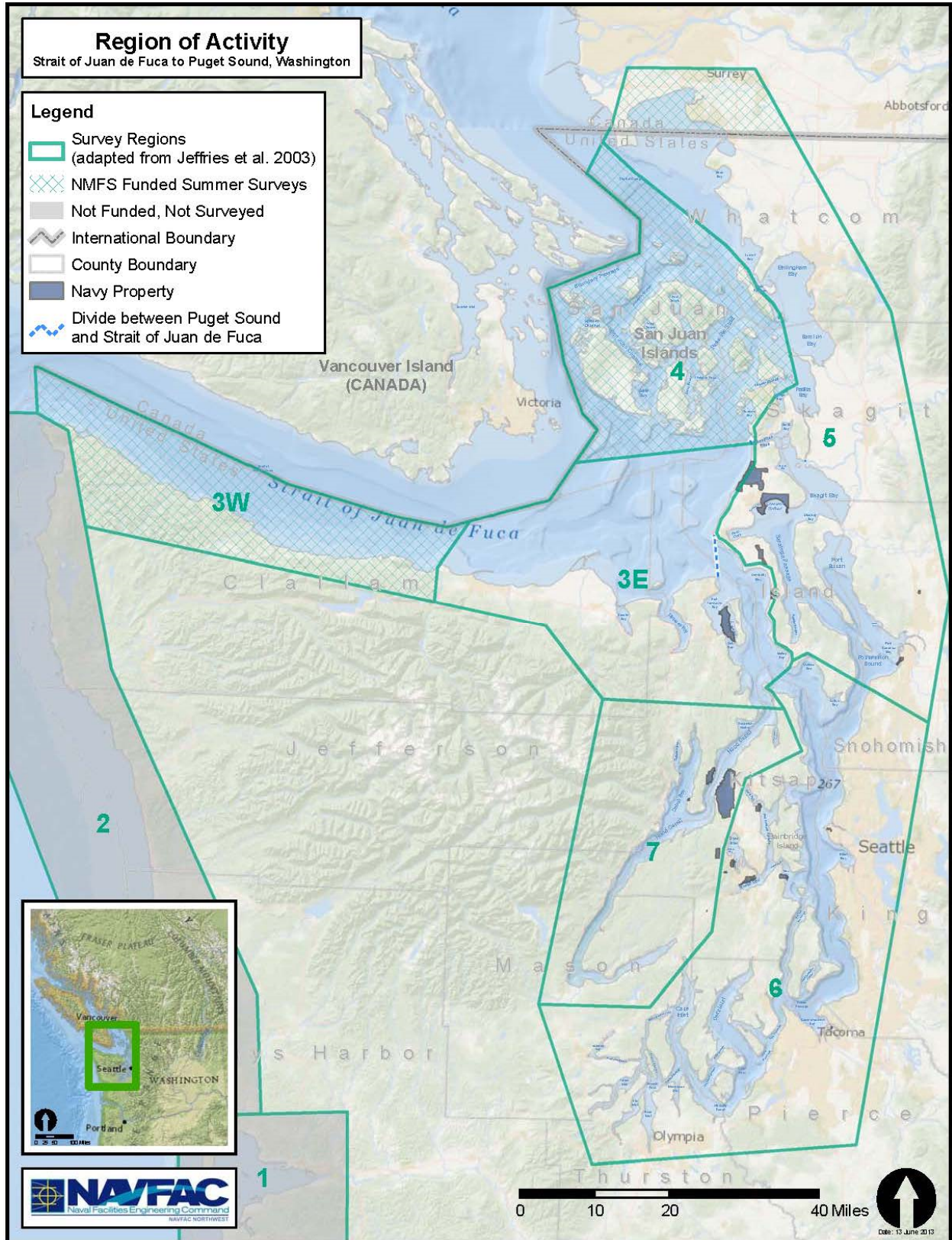


Figure 1. Survey area (adapted from Jeffries et al. 2000).

- Region 8: Hood Canal and Dabob Bay (includes Naval Base Kitsap [NBK] Bangor and vicinity)
- Region 9: Eastern Bays (from Drayton Harbor to Port Gardner) (includes Naval Station [NAVSTA] Everett and Crescent Harbor)
- Region 10: Puget Sound (Whidbey Island to Olympia) (includes Bremerton Shipyard and NBK Bremerton).

Note: The NMFS NWR has partially funded summer-only aerial surveys in U.S. waters of atlas regions including haulout areas in Region 6-Strait of Juan de Fuca-West (west of Port Angeles to Cape Flattery) and regions 11, 12 and 13 (San Juan Islands) to complete surveys needed for assessment of the Washington Inland stock of harbor seal. See **Appendix A** for a comparison of regions as defined in Jeffries et al. (2000), and regions depicted in **Figure 1**, adapted from Jeffries et al. (2003).

### 3. Results

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WDFW conducted 24 aerial surveys of seal and sea lion haulout areas in the study area between 11 March 2013 and 19 February 2014 (**Table 1**). Surveys were conducted under National Oceanic and Atmospheric Administration (NOAA) Permit 13430. Survey dates, survey window, survey region, survey effort, number of images taken, and species recorded are listed in **Table 1**. Five other surveys were cancelled due to weather on 12 March, 20 March, 10 April, and 7 November 2013 and on 18 February 2014.

Marine mammal species recorded during aerial surveys included harbor seal, northern elephant seal (*Mirounga angustirostris*), Steller sea lion, California sea lion, gray whale (*Eschrichtius robustus*), and killer whale (*Orcinus orca*) (**Table 1; Appendices B–E**).

**Harbor Seals.** Harbor seals were most abundant on haulout sites during surveys conducted in July and August surveys (**Table 2; Appendix B**). Maximum counts of 9,791 seals (includes 2,398 pups) were recorded during July aerial surveys. Maximum counts of 10,328 seals (includes 2,844 pups) were recorded during August aerial surveys. These months coincide with the annual pupping and molt cycles for harbor seals in Washington inland waters and are when the highest proportion of the population is hauling out and on land. Using the pooled correction factor of 1.53 (Huber et al. 2001) for seals in the water and not countable yields estimates of 14,980 and 15,802 for July and August aerial surveys. No correction factor is available for adjusting fall, winter and spring survey counts, but aerial survey counts show a substantial decrease in the number of seals hauled indicating a large proportion of the population is not hauling out and in the water during these seasons.

**Steller Sea Lions.** Steller sea lions occur mainly along the outer coast of Washington from the Columbia River to Cape Flattery and move into inland waters after the summer breeding season (Jeffries et al. 2000). Both males and females are present with peak abundance recorded at haulouts at Tatoosh Island (**Figure 2**) on 25 July and 26 July with 687 and 722 Steller sea lions counted. Peak counts were recorded at Puget Sound haulouts during November aerial surveys with 44 animals counted on 6 November and 50 animals counted on 8 November (**Appendix C**).



**Table 1. WDFW aerial surveys conducted during 11 March 2013 – 19 February 2014.**

Survey Date	Survey Window	Survey Regions*	Survey Effort (hours)	Digital Images Taken	Species Recorded
11 March 2013	10:13–14:40	3E, 5, 6, 7	4.5	54	Pv, Ej and Zc
13 March 2013	09:46–14:19	3E, 5, 6, 7	4.6	67	Pv, Ej, Zc and Er
21 March 2013	11:25–15:36	3E, 5, 6, 7	4.2	114	Pv, Ej and Zc
22 March 2013	12:33–16:46	3E, 5, 6, 7	4.2	69	Pv, Ej, Zc and Er
08 April 2013	10:20–15:27	3E, 5, 6, 7	5.1	169	Pv, Ma, Ej, Zc and Er
09 April 2013	10:22–15:27	3E, 5, 6, 7	5.1	181	Pv, Ma, Ej and Zc
23 July 2013 Survey 1	9:43– 14:41	3W, 3E, 4, 5	5	409	Pv, Ej and Zc
23 July 2013 Survey 2	18:12–19:39	7	1.5	9	Pv
24 July 2013	10:23–17:14	3W, 3E, 4, 5, 6	6.7	289	Pv, Ej and Zc
25 July 2013	12:54–15:28	3W, 3E, 4, 5	2.5	52	Pv, Ej and Zc
26 July 2013	10:09–13:51	3W, 3E, 5, 6, 7	3.9	168	Pv, Ej, Zc and Er
05 August 2013	10:00–14:37	3E, 4, 5	4.5	231	Pv, Ej and Zc
06 August 2013	10:09–14:49	3E, 5, 6, 7	4.6	129	Pv, Ej and Zc
07 August 2013	11:29–15:29	3W, 3E, 4, 5	4	152	Pv, Ej and Zc
08 August 2013	11:13–15:42	3E, 4	3.5	240	Pv, Ej, Zc and Oo
26 August 2013	9:26–13:18	3E, 5, 6, 7	3.75	108	Pv, Ej and Zc
27 August 2013	9:53–13:11	3E, 5, 6, 7	3.3	270	Pv, Ej and Zc
06 November 2013	10:18–15:01	3E, 5, 6, 7	4.75	212	Pv, Ej and Zc
08 November 2013	9:56–14:32	3E, 5, 6, 7	4.5	139	Pv, Ej and Zc
03 February 2014	12:20–16:40	3E, 5, 6	4.3	36	Pv, Ej and Zc
04 February 2014	12:29–16:57	3E, 5, 6, 7	3.5	54	Pv, Ej and Zc
05 February 2014	12:33–16:54	3E, 5, 6, 7	3.5	24	Pv, Ej and Zc
17 February 2014	12:01–15:01	3E, 5, 6, 7	3	36	Pv, Ej and Zc
19 February 2014	10:42–14:54	3E, 5, 6, 7	4.1	87	Pv, Ej and Zc

\* see **Figure 1** for depiction of survey regions

Steller sea lions haulout on port security barriers and submarines moored at Delta Pier, NBK Bangor (HDR Inc. 2012; **Figure 3**), floats in Clam Bay adjacent to Navy’s Manchester Fuel Depot (**Figure 4**), port security barrier pontoons at NBK Bremerton and NAVSTA Everett (**Figure 5**). Craven Rock east of Marrowstone Island was used consistently during fall, winter and spring aerial surveys.

**California Sea Lions.** Subadult and adult California sea lion males move into the study area seasonally after dispersal from their breeding rookeries. Peak California sea lion abundance occurred during November surveys (**Table 3; Appendix C**) with 345 sea lions counted on 6 November and 412 counted 8 November. Port security barrier pontoons at NBK Bremerton, floats in Clam Bay adjacent to Navy’s Manchester Fuel Depot (**Figure 4**), NAVSTA Everett (**Figure 5**), and NBK Bangor provide the primary haulout areas for California sea lions in Puget Sound. California sea lions also use submarines moored on Delta Pier at NBK Bangor as haulout areas (**Figure 3; HDR Inc. 2012**).

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

**Table 2. Summary of harbor seals hauled out in study area (Figure 1) from aerial surveys conducted 11 March 2013 – 19 February 2014.**

Survey Date	3W	3E	4	5	6	7
11-Mar-13	NS	242	NS	0	144	2
13-Mar-13	NS	265	NS	156	57	48
21-Mar-13	NS	353	NS	49	517	26
22-Mar-13	NS	146	NS	283	342	25
08-Apr-13	NS	665	NS	275	712	73
09-Apr-13	NS	657	NS	287	618	10
23-July-13	NS	706 (189 pups)	3710 (999 pups)	1633 (339 pups)	NS	90 (5 pups)
24-Jul-13	43 (5 pups)	1624 (391 pups)	2801 (643 pups)	220 (18 pups)	1448 (330 pups)	NS
25-Jul-13	62 (3 pups)	1015 (304 pups)	315 (54 pups)	NS	NS	NS
26-Jul-13	470 (60 pups)	2440 (665 pups)	782 (235 pups)	93 (31 pups)	NS	NS
05-Aug-13	NS	1191 (397 pups)	3753 (1206 pups)	1072 (266 pups)	NS	NS
06-Aug-13	163 (41 pups)	1442 (458 pups)	NS	76 (23 pups)	1441 (394 pups)	20 (2 pups)
07-Aug-13	154 (30 pups)	1194 (362 pups)	1036 (259 pups)	1723 (448 pups)	NS	NS
08-Aug-13	NS	1133 (297 pups)	4823 (1369 pups)	NS	NS	NS
26-Aug-13	NS	192 (54 pups)	NS	371 (23 pups)	567 (96 pups)	346 (79 pups)
27-Aug-13	NS	122 (25pups)	NS	775 (120 pups)	341 (24 pups)	736 (134 pups)
06-Nov-13	NS	769	NS	653	504	923 (1 pup)
08-Nov-13	NS	938	NS	807	538	817
03-Feb-14	NS	478	NS	140	107	NS
04-Feb-14	NS	833	NS	205	74	13
05-Feb-14	NS	112	NS	180	73	51
17-Feb-14	NS	13	NS	60	120	13
19-Feb-14	NS	969	NS	349	535	83

NS = Not Surveyed



**Figure 2. Steller sea lions on Tatoosh Island, 25 July 2013, Taken by Steven Jeffries, WDFW, under NOAA Permit No. 13430.**

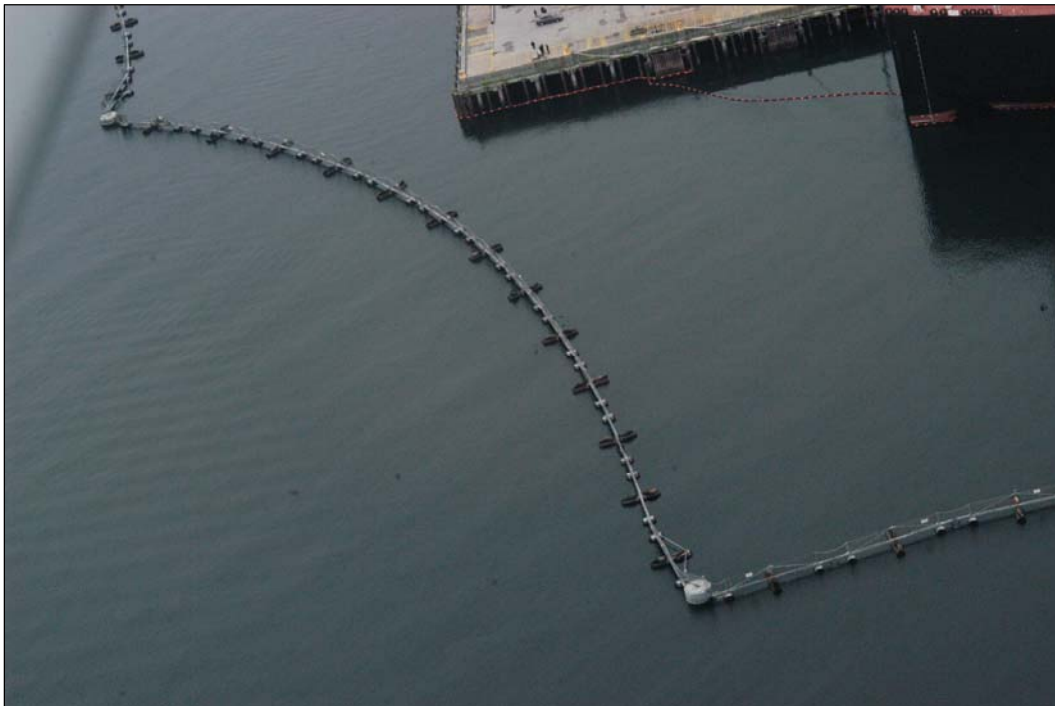


**Figure 3. Male California and Steller sea lions hauled out on submarines at Delta Pier, NBK Bangor. Note: Male Steller sea lion “102Y” was branded as a pup at St. George Reef near Crescent City, CA. Photo courtesy of Andrea Balla-Holden.**





**Figure 4. Steller sea lions, California sea lions and harbor seals hauled out on floats in Clam Bay adjacent to Navy's Manchester Fuel Depot, 8 November 2013. Taken by Steven Jeffries, WDFW, under NOAA Permit No. 13430.**



**Figure 5. California sea lions hauled out on Port Security Barrier at NAVSTA Everett. Taken by Steven Jeffries, WDFW, under NOAA Permit No. 13430.**

**Table 3. Summary of California (Zc) and Steller (Ej) sea lions hauled out at NAVMAG Indian Island, Clam Bay near Manchester Fuel Depot, NBK Bremerton and NAVSTA Everett from aerial surveys conducted 11 March 2013 – 19 February 2014.**

Survey Date	NAVMAG Indian Island		Clam Bay Manchester Fuel Depot		NBK Bremerton		NAVSTA Everett	
	Zc	Ej	Zc	Ej	Zc	Ej	Zc	Ej
11-Mar-13	0	0	0	0	12	3	80	0
13-Mar-13	NS		0	0	6	0	15	0
21-Mar-13	0	0	3	0	16	3	85	0
22-Mar-13	0	0	5	1	26	2	91	1
08-Apr-13	0	0	0	0	33	1	94	0
09-Apr-13	0	0	0	0	34	0	96	1
23-Jul-13	0	0	NS		NS		3	0
24-Jul-13	NS		0	0	0	0	NS	
06-Aug-13	0	0	0	0	2	0	7	0
07-Aug-13	0	0	NS		NS		NS	
26-Aug-13	0	0	0	0	20	1	0	0
27-Aug-13	0	0	0	0	45	0	50	0
06-Nov-13	0	0	6	30	169	0	117	0
08-Nov-13	0	0	53	32	164	0	131	0
03-Feb-14	0	0	0	0	28	0	39	0
04-Feb-14	0	0	0	0	28	0	50	0
05-Feb-14	0	0	1	0	28	0	40	0
17-Feb-14	NS		0	0	17	0	92	0
19-Feb-14	0	0	0	0	0	0	0	0

NS = Not Surveyed

## 4. Discussion

Harbor seals are the most abundant pinniped and present year round in the study area (**Appendix B**). Maximum counts of harbor seals occurred in the study area during July and August aerial surveys (**Table 2**). The harbor seal population in inland waters of Washington was estimated at 14,980 seals in July and 15,802 in August 2013. These estimates coincide with the annual pupping and molt cycles for harbor seals in the inland waters of Washington when maximum numbers of seals are expected to be hauled out (Huber et al. 2001). During fall, winter and spring surveys, counts of seals on haulout site were substantially lower, with the majority of the harbor seal population not hauling out and in the water. The highest abundance of harbor seals at Navy facilities was recorded on logbooms adjacent to NAVSTA Everett.



Steller sea lions are present in the study area year round (**Appendix C**) with maximum counts recorded at Navy facilities (**Table 3**) during November aerial surveys when 30 and 32 Steller sea lions were hauled on floats in Clam Bay adjacent to the Navy's Manchester Fuel Depot. Only a small number of Steller sea lions (1–3 animals) were recorded using the port security barriers at NBK Bremerton and NAVSTA Everett. Craven Rock on the east side of Marrowstone Island was another haulout used consistently during aerial survey windows. No Steller sea lions were observed using the port security barriers at NAVMAG Indian Island.

California sea lions are present in the study area year round (**Appendix D**) with maximum counts recorded at Navy facilities during November aerial surveys (**Table 3**). Aerial survey counts at NBK Bremerton ranged from 2 to 169 animals, with maximum counts of 169 animals (6 November 2013) and 164 animals (8 November 2013) recorded hauled out on port security barriers. Aerial survey counts at NAVSTA Everett ranged from 3 to 131 animals, with maximum counts of 117 animals (6 November 2013) and 131 animals (8 November 2013) recorded hauled out on port security barriers. No California sea lions were observed using the port security barriers at NAVMAG Indian Island.

## 5. Acknowledgements

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NMFS Northwest Region provided partial funding for July and August aerial surveys covering U.S. waters of the Strait of Juan de Fuca (Cape Flattery to Port Angeles) as well as the San Juan Islands. Thanks are due to Andrea Balla-Holden (Naval Facilities Engineering Command Northwest) for support and coordination of ground counts at U.S. Navy facilities and assisting with report preparation; pilot Jeff Well and Rite Bros. Aviation in Port Angeles for providing aerial survey support; Josh Oliver, Bethany Diehl and Dyanna Lambourn with WDFW for assisting with aerial surveys, counting images, data entry and data QA/QC; and Kristen Ampela (HDR) for assisting with contract management and report preparation.

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## APPENDIX A: COMPARISON OF REGIONS BETWEEN JEFFRIES ET AL. (2000) AND JEFFRIES ET AL. (2003)

<b>Regions in Jeffries et al. (2000): Atlas of Seal &amp; Sea Lion Haulout Sites in Washington</b>	<b>Regions in Jeffries et al. (2003): Trends &amp; Status of Harbor Seals in Washington State</b>
1-Columbia River	No corresponding region. Not included in Jeffries et al. 2003
2-Willapa Bay	1-Coastal Estuaries
3-Grays Harbor	
4-Olympic Coast-South	2-Olympic Coast
5-Olympic Coast-North	
6-Strait of Juan de Fuca-West	3W-Strait of Juan de Fuca-West
7-Strait of Juan de Fuca-East	3E- Strait of Juan de Fuca-East
8-Hood Canal	7-Hood Canal
9-Eastern Bays	5-Eastern Bays
10-Puget Sound	6-Puget Sound
11-San Juan Islands (Rosario Strait)	4-San Juan Islands
12-San Juan Islands (San Juan Channel)	
13-San Juan Islands (Haro Strait)	
14-British Columbia (Fraser River to Race Rocks)	No corresponding region. Not included in Jeffries et al. (2003)

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**APPENDIX B: HARBOR SEALS (*PHOCA VITULINA*)  
RECORDED DURING AERIAL SURVEYS CONDUCTED 11  
MARCH 2013 TO 19 FEBRUARY 2014**

<b>Date</b>	<b>Time</b>	<b>Sitecode*</b>	<b>Count</b>	<b>Pups</b>	<b>Remarks</b>
11-Mar-13	10:15	6.12	56	0	
11-Mar-13	10:17	6.12	17	0	
11-Mar-13	10:26	7.03	0	0	
11-Mar-13	10:29	7.02	0	0	
11-Mar-13	10:31	7.04	0	0	
11-Mar-13	10:34	7.05	12	0	
11-Mar-13	10:34	7.06	0	0	
11-Mar-13	10:43	7.09	0	0	
11-Mar-13	10:46	7.10	13	0	
11-Mar-13	10:46	7.10	17	0	
11-Mar-13	10:51	7.15	11	0	
11-Mar-13	10:53	7.15	10	0	
11-Mar-13	10:53	7.15	58	0	
11-Mar-13	10:53	7.15	13	0	
11-Mar-13	10:54	7.15	5	0	
11-Mar-13	11:17	9.37	0	0	
11-Mar-13	11:39	10.00	2	0	new = breakwater at Elliot Bay Marina
11-Mar-13	11:45	10.02	11	0	
11-Mar-13	11:48	10.00	0	0	new = floats in Clam Bay at EPA Lab
11-Mar-13	11:49	10.00	30	0	new = Orchard Rocks
11-Mar-13	11:54	10.00	6	0	new = logbooms at Suldan's Marina in Sinclair Inlet
11-Mar-13	11:56	10.17	0	0	
11-Mar-13	12:03	10.01	0	0	
11-Mar-13	12:03	10.01	16	0	
11-Mar-13	12:24	10.18	15	0	
11-Mar-13	12:34	10.06	0	0	
11-Mar-13	12:43	10.07	46	0	
11-Mar-13	12:55	10.09	0	0	
11-Mar-13	13:02	10.12	1	0	
11-Mar-13	13:13	10.40	0	0	
11-Mar-13	13:21	10.14	8	0	
11-Mar-13	13:22	10.14	9	0	
11-Mar-13	13:53	8.14	0	0	
11-Mar-13	14:01	8.03	2	0	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

Date	Time	Sitecode*	Count	Pups	Remarks
11-Mar-13	14:04	8.12	0	0	
11-Mar-13	14:16	7.05	30	0	
11-Mar-13	14:23	7.07	0	0	
11-Mar-13	14:24	7.08	5	0	
11-Mar-13	14:32	7.02	0	0	
<b>Total</b>			<b>393</b>	<b>0</b>	
12-Mar-13					Survey cancelled due to weather
13-Mar-13	10:02	7.07	0	0	
13-Mar-13	10:03	7.08	73	0	
13-Mar-13	10:28	9.04	0	0	
13-Mar-13	10:28	9.05	0	0	
13-Mar-13	10:28	9.06	0	0	
13-Mar-13	10:38	9.08	1	0	
13-Mar-13	11:04	9.17	2	0	
13-Mar-13	11:06	11.37	28	0	
13-Mar-13	11:11	9.18	0	0	
13-Mar-13	11:14	9.00	2	0	new = Hat/Saddlebag/Huckleberry Islands in Padilla Bay
13-Mar-13	11:20	9.20	0	0	
13-Mar-13	11:20	9.21	0	0	
13-Mar-13	11:20	9.22	0	0	
13-Mar-13	11:20	9.23	0	0	
13-Mar-13	11:20	9.24	0	0	
13-Mar-13	11:20	9.25	0	0	
13-Mar-13	11:23	9.28	42	0	
13-Mar-13	11:26	9.29	1	0	
13-Mar-13	11:36	9.31	14	0	
13-Mar-13	11:44	9.39	8	0	
13-Mar-13	11:53	9.38	51	0	
13-Mar-13	11:53	9.38	30	0	
13-Mar-13	12:03	9.34	5	0	
13-Mar-13	12:35	10.02	19	0	
13-Mar-13	12:39	10.00	37	0	new = Orchard Rocks
13-Mar-13	12:50	10.00	1	0	new = logbooms at Suldan's Marina in Sinclair Inlet
13-Mar-13	13:26	8.17	1	0	
13-Mar-13	13:28	8.08	0	0	
13-Mar-13	13:41	8.05	0	0	
13-Mar-13	13:42	8.04	27	0	
13-Mar-13	13:44	8.16	7	0	
13-Mar-13	13:46	8.13	0	0	
13-Mar-13	13:48	8.03	13	0	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

Date	Time	Sitecode*	Count	Pups	Remarks
13-Mar-13	13:50	8.12	0	0	
13-Mar-13	13:51	8.11	0	0	
13-Mar-13	14:01	7.05	141	0	
13-Mar-13	14:01	7.05	10	0	
13-Mar-13	14:08	7.03	10	0	
13-Mar-13	14:16	6.12	0	0	
13-Mar-13	14:16	6.12	31	0	
<b>Total</b>			<b>554</b>	<b>0</b>	
20-Mar-13					Survey cancelled due to weather
21-Mar-13	11:30	10.06	0	0	
21-Mar-13	11:32	10.04	0	0	
21-Mar-13	11:35	10.03	151	0	
21-Mar-13	11:39	10.07	122	0	
21-Mar-13	11:41	10.89	16	0	Tug "Betty" with logboom 47°11'19.8" N 122° 42'42.2" W
21-Mar-13	11:46	10.08	0	0	
21-Mar-13	11:52	10.09	81	0	
21-Mar-13	11:53	10.09	21	0	
21-Mar-13	11:57	10.12	44	0	
21-Mar-13	12:07	10.11	1	0	
21-Mar-13	12:09	10.40	7	0	
21-Mar-13	12:11	10.14	1	0	
21-Mar-13	12:14	10.14	0	0	
21-Mar-13	12:16	10.14	0	0	
21-Mar-13	12:32	8.08	8	0	
21-Mar-13	12:38	8.15	3	0	
21-Mar-13	12:41	8.06	0	0	
21-Mar-13	12:41	8.07	0	0	
21-Mar-13	12:43	8.15	0	0	
21-Mar-13	12:46	8.05	7	0	
21-Mar-13	12:51	8.04	3	0	
21-Mar-13	12:52	8.16	0	0	
21-Mar-13	12:56	8.03	5	0	
21-Mar-13	12:58	8.12	0	0	
21-Mar-13	13:00	8.11	0	0	
21-Mar-13	13:06	7.15	1	0	
21-Mar-13	13:06	7.15	76	0	
21-Mar-13	13:06	7.15	6	0	
21-Mar-13	13:08	7.15	7	0	
21-Mar-13	13:15	7.09	165	0	
21-Mar-13	13:23	7.06	0	0	
21-Mar-13	13:24	7.05	317	0	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

Date	Time	Sitecode*	Count	Pups	Remarks
21-Mar-13	13:36	7.07	20	0	
21-Mar-13	13:36	7.08	92	0	
21-Mar-13	13:36	7.08	353	0	
21-Mar-13	13:51	9.39	21	0	
21-Mar-13	14:07	9.38	0	0	
21-Mar-13	14:16	9.36	0	0	
21-Mar-13	14:47	10.02	23	0	
21-Mar-13	14:51	10.00	4	0	new = Orchard Rocks
21-Mar-13	15:25	10.18	46	0	W
21-Mar-13	15:28	10.89	28	0	Tug "Swinomish" with logboom 47°18'41" N 122°28' 36" W
<b>Total</b>			<b>1629</b>	<b>0</b>	
22-Mar-13	12:34	10.89	180	0	Tug "Swinomish" with logboom 47°12'50.7" N 122°37'5.6" W
22-Mar-13	12:39	10.06	0	0	
22-Mar-13	12:42	10.03	0	0	
22-Mar-13	12:45	10.07	0	0	
22-Mar-13	12:55	10.09	0	0	
22-Mar-13	12:55	10.09	39	0	
22-Mar-13	13:03	10.13	3	0	
22-Mar-13	13:06	10.11	17	0	
22-Mar-13	13:17	10.14	27	0	
22-Mar-13	13:37	8.08	0	0	
22-Mar-13	14:02	8.03	25	0	
22-Mar-13	14:22	7.09	0	0	
22-Mar-13	14:32	7.05	30	0	
22-Mar-13	14:32	7.05	31	0	
22-Mar-13	14:50	9.28	81	0	
22-Mar-13	15:14	9.89	202	0	Tug "Vulcan" with logboom 48°8'49.8" N 122°32'49.5" W
22-Mar-13	15:39	7.15	43	0	
22-Mar-13	15:40	7.15	42	0	
22-Mar-13	16:08	10.00	10	0	new = Orchard Rocks
22-Mar-13	16:12	10.00	11	0	new = logbooms at Suldán's Marina in Sinclair Inlet
22-Mar-13	16:37	10.18	25	0	
22-Mar-13	16:37	10.18	130	0	
<b>Total</b>			<b>896</b>	<b>0</b>	
08-Apr-13	10:25	10.06	104	0	
08-Apr-13	10:29	10.03	41	0	
08-Apr-13	10:36	10.07	136	0	
08-Apr-13	10:41	10.08	6	0	



*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

<b>Date</b>	<b>Time</b>	<b>Sitecode*</b>	<b>Count</b>	<b>Pups</b>	<b>Remarks</b>
08-Apr-13	10:45	10.09	92	0	
08-Apr-13	10:46	10.09	36	0	
08-Apr-13	10:50	10.12	15	0	
08-Apr-13	10:54	10.13	0	0	
08-Apr-13	10:56	10.13	0	0	
08-Apr-13	11:01	10.40	18	0	
08-Apr-13	11:11	10.14	38	0	
08-Apr-13	11:38	8.06	2	0	
08-Apr-13	11:48	8.16	6	0	
08-Apr-13	11:52	8.03	53	0	
08-Apr-13	11:52	8.03	12	0	
08-Apr-13	12:12	7.05	142	0	
08-Apr-13	12:20	7.07	63	0	
08-Apr-13	12:20	7.07	77	0	
08-Apr-13	12:22	7.08	203	0	
08-Apr-13	12:32	9.00	35	0	new = Hat/Saddlebag/Huckleberry Islands in Padilla Bay
08-Apr-13	12:34	9.00	1	0	new = Hat/Saddlebag/Huckleberry Islands in Padilla Bay
08-Apr-13	12:35	9.21	0	0	
08-Apr-13	12:35	9.24	0	0	
08-Apr-13	12:38	9.28	62	0	
08-Apr-13	12:55	9.39	29	0	
08-Apr-13	13:11	9.34	2	0	
08-Apr-13	13:23	9.37	146	0	
08-Apr-13	13:41	7.15	28	0	
08-Apr-13	13:41	7.15	16	0	
08-Apr-13	13:42	7.15	34	0	
08-Apr-13	13:42	7.15	1	0	
08-Apr-13	14:04	10.19	4	0	
08-Apr-13	14:16	10.02	13	0	
08-Apr-13	14:26	10.01	11	0	
08-Apr-13	15:20	10.18	31	0	
08-Apr-13	15:20	10.18	167	0	
<b>Total</b>			<b>1624</b>	<b>0</b>	
09-Apr-13	10:26	10.21	0	0	
09-Apr-13	10:27	10.06	64	0	
09-Apr-13	10:30	10.03	15	0	
09-Apr-13	10:37	10.07	66	0	
09-Apr-13	10:41	10.08	10	0	
09-Apr-13	10:46	10.09	61	0	
09-Apr-13	10:46	10.09	1	0	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

Date	Time	Sitecode*	Count	Pups	Remarks
09-Apr-13	10:54	10.12	12	0	
09-Apr-13	10:56	10.13	6	0	
09-Apr-13	10:58	10.13	1	0	
09-Apr-13	10:59	10.13	3	0	
09-Apr-13	11:04	10.11	0	0	
09-Apr-13	11:11	10.14	14	0	
09-Apr-13	11:12	10.14	13	0	
09-Apr-13	11:21	8.17	0	0	
09-Apr-13	11:28	8.08	0	0	
09-Apr-13	11:45	8.16	10	0	
09-Apr-13	11:49	8.03	0	0	
09-Apr-13	11:52	8.11	0	0	
09-Apr-13	11:56	8.00	0	0	new = Sister Rock at Hood Canal Bridge
09-Apr-13	12:07	7.15	59	0	
09-Apr-13	12:08	7.15	8	0	
09-Apr-13	12:08	7.15	104	0	
09-Apr-13	12:09	7.15	30	0	
09-Apr-13	12:15	7.09	234	0	
09-Apr-13	12:27	7.05	30	0	
09-Apr-13	12:32	7.03	24	0	
09-Apr-13	12:39	7.07	79	0	
09-Apr-13	12:39	7.07	29	0	
09-Apr-13	12:39	7.07	60	0	
09-Apr-13	12:51	9.00	0	0	new = Hat/Saddlebag/Huckleberry Islands in Padilla Bay
09-Apr-13	12:51	9.00	6	0	new = Hat/Saddlebag/Huckleberry Islands in Padilla Bay
09-Apr-13	12:52	9.00	0	0	new = Hat/Saddlebag/Huckleberry Islands in Padilla Bay
09-Apr-13	12:55	9.24	61	0	
09-Apr-13	13:00	9.28	29	0	
09-Apr-13	13:08	9.31	36	0	
09-Apr-13	13:09	9.32	26	0	
09-Apr-13	13:17	9.39	32	0	
09-Apr-13	13:43	9.37	97	0	
09-Apr-13	13:59	10.89	273	0	Tug "Vulcan" with logboom 47°45'4.0" N 122° 26'47.1" W
09-Apr-13	14:03	10.19	3	0	
09-Apr-13	14:15	10.02	8	0	
09-Apr-13	14:34	10.00	18	0	new = logbooms at Suldan's Marina in Sinclair Inlet
09-Apr-13	15:20	10.18	10	0	
09-Apr-13	15:20	10.18	40	0	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

Date	Time	Sitecode*	Count	Pups	Remarks
09-Apr-13	15:24	10.00	0	0	new = Point Defiance marker
<b>Total</b>			<b>1572</b>	<b>0</b>	
10-Apr-13					Survey cancelled due to weather
23-Jul-13	10:02	13.32	31	5	First survey flight of day
23-Jul-13	10:03	13.32	4	2	
23-Jul-13	10:04	13.32	46	9	
23-Jul-13	10:08	13.37	2	0	
23-Jul-13	10:09	13.31	2	1	new = Smallpox Bay/San Juan County Park
23-Jul-13	10:11	13.00	13	5	new = Smallpox Bay/San Juan County Park
23-Jul-13	10:13	13.31	9	4	
23-Jul-13	10:13	13.31	41	10	
23-Jul-13	10:14	13.30	1	0	
23-Jul-13	10:16	13.29	18	6	
23-Jul-13	10:17	13.28	19	7	
23-Jul-13	10:18	13.19	16	4	
23-Jul-13	10:20	13.26	12	3	
23-Jul-13	10:21	13.25	183	15	
23-Jul-13	10:23	13.24	44	16	
23-Jul-13	10:24	13.34	7	3	
23-Jul-13	10:29	13.15	5	2	
23-Jul-13	10:29	13.15	23	1	
23-Jul-13	10:30	13.15	5	1	
23-Jul-13	10:31	13.16	3	1	
23-Jul-13	10:31	13.16	3	1	
23-Jul-13	10:33	13.17	139	46	
23-Jul-13	10:35	13.19	44	16	
23-Jul-13	10:36	13.18	134	27	
23-Jul-13	10:36	13.20	27	10	
23-Jul-13	10:37	13.18	32	6	
23-Jul-13	10:38	13.17	51	7	
23-Jul-13	10:39	13.21	71	34	
23-Jul-13	10:40	13.21	45	14	
23-Jul-13	10:40	13.21	8	3	
23-Jul-13	10:42	13.13	26	9	
23-Jul-13	10:42	13.14	100	44	
23-Jul-13	10:43	13.13	55	21	
23-Jul-13	10:44	13.13	66	21	
23-Jul-13	10:45	13.12	15	6	
23-Jul-13	10:46	13.12	185	37	
23-Jul-13	10:47	13.12	86	19	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

<b>Date</b>	<b>Time</b>	<b>Sitecode*</b>	<b>Count</b>	<b>Pups</b>	<b>Remarks</b>
23-Jul-13	10:51	13.11	136	42	
23-Jul-13	10:52	13.11	106	14	
23-Jul-13	10:53	13.11	59	20	
23-Jul-13	10:54	13.09	108	17	
23-Jul-13	10:55	13.08	146	47	
23-Jul-13	10:58	13.36	1	0	
23-Jul-13	10:59	13.36	40	11	
23-Jul-13	11:01	13.06	41	13	
23-Jul-13	11:05	11.01	48	18	
23-Jul-13	11:06	11.01	45	17	
23-Jul-13	11:06	11.01	18	8	
23-Jul-13	11:07	11.02	157	49	
23-Jul-13	11:08	11.02	70	23	
23-Jul-13	11:09	11.03	111	30	
23-Jul-13	11:12	13.04	178	36	
23-Jul-13	11:13	13.04	155	26	
23-Jul-13	11:14	13.02	62	27	
23-Jul-13	11:15	13.02	61	30	
23-Jul-13	11:16	13.03	11	2	
23-Jul-13	11:17	13.03	11	4	
23-Jul-13	11:18	13.03	38	19	
23-Jul-13	11:18	13.03	10	5	
23-Jul-13	11:19	13.16	14	5	
23-Jul-13	11:19	13.16	17	6	
23-Jul-13	11:23	13.07	63	24	
23-Jul-13	11:24	13.07	32	6	
23-Jul-13	11:32	9.02	3	0	
23-Jul-13	11:37	9.04	163	16	
23-Jul-13	11:38	9.04	54	16	
23-Jul-13	11:40	9.13	59	14	
23-Jul-13	11:41	9.05	25	8	
23-Jul-13	11:44	9.07	13	4	
23-Jul-13	11:49	9.08	14	1	
23-Jul-13	11:49	9.08	47	1	
23-Jul-13	11:53	9.09	6	0	
23-Jul-13	11:55	9.10	1	0	
23-Jul-13	12:01	11.04	134	26	
23-Jul-13	12:08	9.12	10	2	
23-Jul-13	12:11	9.15	7	3	
23-Jul-13	12:15	9.17	147	31	
23-Jul-13	12:19	11.17	7	3	
23-Jul-13	12:19	11.17	129	33	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

<b>Date</b>	<b>Time</b>	<b>Sitecode*</b>	<b>Count</b>	<b>Pups</b>	<b>Remarks</b>
23-Jul-13	12:22	11.37	131	22	
23-Jul-13	12:27	9.19	70	17	
23-Jul-13	12:32	9.21	127	16	
23-Jul-13	12:34	9.00	0	0	new = Hat/Saddlebag/Huckleberry Islands in Padilla Bay
23-Jul-13	12:35	9.00	0	0	new = Hat/Saddlebag/Huckleberry Islands in Padilla Bay
23-Jul-13	12:39	9.23	49	11	
23-Jul-13	12:41	9.24	120	19	
23-Jul-13	12:43	9.25	32	6	
23-Jul-13	12:51	9.29	89	12	
23-Jul-13	12:55	9.31	3	1	
23-Jul-13	12:56	9.31	54	13	
23-Jul-13	13:00	9.31	11	5	
23-Jul-13	13:00	9.31	3	1	
23-Jul-13	13:00	9.31	4	2	
23-Jul-13	13:00	9.31	7	1	
23-Jul-13	13:03	9.31	25	11	
23-Jul-13	13:03	9.31	24	11	
23-Jul-13	13:03	9.31	2	1	
23-Jul-13	13:03	9.31	26	7	
23-Jul-13	13:05	9.31	56	21	
23-Jul-13	13:06	9.31	47	10	
23-Jul-13	13:08	9.31	4	2	
23-Jul-13	13:08	9.31	20	5	
23-Jul-13	13:08	9.31	6	2	
23-Jul-13	13:08	9.31	59	12	
23-Jul-13	13:08	9.31	5	1	
23-Jul-13	13:08	9.31	9	3	
23-Jul-13	13:08	9.31	5	2	
23-Jul-13	13:11	9.32	110	32	
23-Jul-13	13:16	9.34	14	0	
23-Jul-13	13:19	9.34	11	0	
23-Jul-13	13:20	9.34	27	5	
23-Jul-13	13:20	9.34	30	6	
23-Jul-13	13:29	9.36	7	3	
23-Jul-13	13:30	9.37	28	5	
23-Jul-13	13:50	8.02	18	0	
23-Jul-13	13:56	7.15	1	0	
23-Jul-13	13:57	7.15	6	3	
23-Jul-13	13:57	7.15	1	0	
23-Jul-13	13:58	7.15	50	6	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

<b>Date</b>	<b>Time</b>	<b>Sitecode*</b>	<b>Count</b>	<b>Pups</b>	<b>Remarks</b>
23-Jul-13	13:59	7.15	1	0	
23-Jul-13	14:05	7.09	3	0	
23-Jul-13	14:16	7.06	67	14	
23-Jul-13	14:16	7.06	331	124	
23-Jul-13	14:16	7.06	12	5	
23-Jul-13	14:23	7.05	8	3	
23-Jul-13	14:24	7.05	41	5	
23-Jul-13	14:24	7.05	185	29	
<b>Total</b>			<b>6067</b>	<b>1527</b>	
23-Jul-13	18:34	8.03	20	1	Second survey flight of day
23-Jul-13	18:40	8.04	10	2	
23-Jul-13	18:41	8.04	4	0	
23-Jul-13	18:41	8.04	37	2	
23-Jul-13	18:45	8.05	0	0	
23-Jul-13	18:58	8.09	1	0	
23-Jul-13	19:01	8.17	0	0	
<b>Total</b>			<b>72</b>	<b>5</b>	
24-Jul-13	10:25	6.12	19	3	
24-Jul-13	10:26	6.11	0	0	
24-Jul-13	10:26	6.12	24	2	
24-Jul-13	10:37	7.04	7	2	
24-Jul-13	10:40	7.05	12	0	
24-Jul-13	10:40	7.05	7	2	
24-Jul-13	10:40	7.05	160	33	
24-Jul-13	10:44	7.06	94	10	
24-Jul-13	10:44	7.06	86	17	
24-Jul-13	10:44	7.06	5	2	
24-Jul-13	10:46	7.06	6	3	
24-Jul-13	10:46	7.06	5	2	
24-Jul-13	10:46	7.06	37	13	
24-Jul-13	10:46	7.06	2	1	
24-Jul-13	10:47	7.06	49	24	
24-Jul-13	10:48	7.06	52	15	
24-Jul-13	10:49	7.06	1	0	
24-Jul-13	11:01	12.10	244	23	
24-Jul-13	11:01	12.10	7	2	
24-Jul-13	11:03	12.13	6	1	
24-Jul-13	11:03	12.13	4	2	
24-Jul-13	11:04	12.13	54	10	
24-Jul-13	11:05	12.14	7	2	
24-Jul-13	11:05	12.14	6	2	
24-Jul-13	11:05	12.14	78	15	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

<b>Date</b>	<b>Time</b>	<b>Sitecode*</b>	<b>Count</b>	<b>Pups</b>	<b>Remarks</b>
24-Jul-13	11:05	12.14	6	3	
24-Jul-13	11:05	12.14	3	2	
24-Jul-13	11:05	12.14	20	4	
24-Jul-13	11:05	12.14	4	1	
24-Jul-13	11:06	12.15	45	14	
24-Jul-13	11:07	12.16	15	2	
24-Jul-13	11:08	12.16	59	11	
24-Jul-13	11:10	12.16	9	3	
24-Jul-13	11:10	12.18	6	2	
24-Jul-13	11:12	12.20	1	0	
24-Jul-13	11:12	12.20	9	3	
24-Jul-13	11:12	12.20	40	14	
24-Jul-13	11:13	12.23	12	7	
24-Jul-13	11:13	12.23	3	1	
24-Jul-13	11:13	12.23	18	7	
24-Jul-13	11:15	12.23	9	3	
24-Jul-13	11:15	12.23	2	1	
24-Jul-13	11:15	12.23	4	1	
24-Jul-13	11:16	12.23	33	8	
24-Jul-13	11:16	12.23	2	1	
24-Jul-13	11:16	12.23	4	2	
24-Jul-13	11:16	12.23	5	2	
24-Jul-13	11:18	12.23	47	8	
24-Jul-13	11:20	12.25	31	13	
24-Jul-13	11:23	12.27	6	2	
24-Jul-13	11:24	12.30	12	3	
24-Jul-13	11:25	12.50	10	5	
24-Jul-13	11:25	12.50	11	4	
24-Jul-13	11:27	12.34	77	26	
24-Jul-13	11:27	12.34	71	12	
24-Jul-13	11:29	12.47	47	15	
24-Jul-13	11:30	12.35	4	1	
24-Jul-13	11:34	12.35	4	2	
24-Jul-13	11:34	12.35	15	3	
24-Jul-13	11:37	12.00	9	1	
24-Jul-13	11:39	12.37	10	4	
24-Jul-13	11:39	12.37	6	3	
24-Jul-13	11:39	12.37	2	1	
24-Jul-13	11:39	12.37	2	1	
24-Jul-13	11:41	12.38	9	3	
24-Jul-13	11:43	12.39	22	6	
24-Jul-13	11:44	12.40	5	2	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

<b>Date</b>	<b>Time</b>	<b>Sitecode*</b>	<b>Count</b>	<b>Pups</b>	<b>Remarks</b>
24-Jul-13	11:44	12.40	2	1	
24-Jul-13	11:44	12.40	4	2	
24-Jul-13	11:44	12.40	2	1	
24-Jul-13	11:44	12.40	8	2	
24-Jul-13	11:44	12.40	32	3	
24-Jul-13	11:44	12.40	8	2	
24-Jul-13	11:47	12.49	18	5	
24-Jul-13	11:50	12.49	32	7	
24-Jul-13	11:53	11.38	12	2	
24-Jul-13	11:55	11.35	15	1	
24-Jul-13	11:55	11.35	14	3	
24-Jul-13	11:58	11.11	4	2	
24-Jul-13	11:58	11.11	2	1	
24-Jul-13	12:02	11.09	197	31	
24-Jul-13	12:02	11.09	4	2	
24-Jul-13	12:02	11.11	106	35	
24-Jul-13	12:03	11.10	2	1	
24-Jul-13	12:03	11.10	2	1	
24-Jul-13	12:03	11.10	2	1	
24-Jul-13	12:03	11.10	4	2	
24-Jul-13	12:04	11.10	81	39	
24-Jul-13	12:08	11.12	133	30	
24-Jul-13	12:12	11.15	43	7	
24-Jul-13	12:12	11.15	13	3	
24-Jul-13	12:13	11.15	2	0	
24-Jul-13	12:15	11.14	33	13	
24-Jul-13	12:20	12.41	8	4	
24-Jul-13	12:20	12.41	8	1	
24-Jul-13	12:21	12.41	38	6	
24-Jul-13	12:21	12.42	3	1	
24-Jul-13	12:21	12.42	4	2	
24-Jul-13	12:21	12.42	9	4	
24-Jul-13	12:21	12.42	4	2	
24-Jul-13	12:24	11.20	0	0	
24-Jul-13	12:25	12.44	10	5	
24-Jul-13	12:28	12.46	14	3	
24-Jul-13	12:29	12.46	11	3	
24-Jul-13	12:35	12.09	13	1	
24-Jul-13	12:35	12.09	23	4	
24-Jul-13	12:36	12.09	82	11	
24-Jul-13	12:36	12.12	3	0	
24-Jul-13	12:36	12.12	9	1	



*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

<b>Date</b>	<b>Time</b>	<b>Sitecode*</b>	<b>Count</b>	<b>Pups</b>	<b>Remarks</b>
24-Jul-13	12:37	12.06	19	3	
24-Jul-13	12:38	12.08	3	1	
24-Jul-13	12:38	12.08	42	7	
24-Jul-13	12:41	12.04	12	5	
24-Jul-13	12:41	12.04	50	7	
24-Jul-13	12:42	12.01	4	2	
24-Jul-13	12:42	12.01	56	13	
24-Jul-13	12:42	12.01	20	3	
24-Jul-13	12:42	12.01	39	6	
24-Jul-13	12:42	12.01	46	14	
24-Jul-13	12:42	12.01	64	3	
24-Jul-13	12:42	12.01	30	11	
24-Jul-13	12:46	12.01	35	8	
24-Jul-13	12:48	12.03	6	1	
24-Jul-13	12:48	12.03	12	2	
24-Jul-13	12:48	12.03	4	2	
24-Jul-13	12:51	11.32	23	2	
24-Jul-13	12:52	11.30	16	4	
24-Jul-13	12:52	11.30	2	1	
24-Jul-13	12:53	11.30	3	1	
24-Jul-13	12:53	11.30	23	3	
24-Jul-13	12:56	11.28	2	1	
24-Jul-13	12:56	11.28	6	3	
24-Jul-13	12:58	11.29	38	6	
24-Jul-13	12:58	11.29	2	1	
24-Jul-13	12:58	11.29	2	1	
24-Jul-13	12:58	11.29	7	1	
24-Jul-13	12:58	11.29	13	5	
24-Jul-13	12:58	11.29	93	17	
24-Jul-13	13:06	7.08	244	65	
24-Jul-13	13:07	7.08	37	10	
24-Jul-13	13:07	7.08	273	31	
24-Jul-13	13:08	7.08	6	2	
24-Jul-13	13:08	7.08	64	22	
24-Jul-13	13:10	7.07	10	5	
24-Jul-13	13:10	7.07	13	5	
24-Jul-13	13:10	7.07	12	5	
24-Jul-13	13:10	7.07	4	2	
24-Jul-13	13:10	7.07	30	12	
24-Jul-13	13:12	7.07	56	21	
24-Jul-13	13:12	7.07	34	16	
24-Jul-13	13:12	7.07	36	11	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

Date	Time	Sitecode*	Count	Pups	Remarks
24-Jul-13	13:12	7.07	108	18	
24-Jul-13	13:12	7.07	38	7	
24-Jul-13	13:12	7.07	32	10	
24-Jul-13	13:12	7.07	104	25	
24-Jul-13	13:21	9.39	8	2	
24-Jul-13	13:21	9.39	21	3	
24-Jul-13	13:21	9.39	3	1	
24-Jul-13	13:21	9.39	7	3	
24-Jul-13	13:28	9.39	2	1	
24-Jul-13	13:46	9.89	179	8	Tug "Swinomish" with logboom 47°47' 29.9" N 122°25'46.2" W
24-Jul-13	13:54	10.19	4	0	
24-Jul-13	14:04	10.02	6	0	
24-Jul-13	14:08	10.00	64	3	new = Orchard Rocks
24-Jul-13	14:08	10.00	3	1	new = Orchard Rocks
24-Jul-13	14:17	10.03	0	0	
24-Jul-13	14:22	10.06	315	56	
24-Jul-13	14:22	10.06	6	3	
24-Jul-13	14:27	10.07	5	1	
24-Jul-13	14:28	10.07	99	16	
24-Jul-13	14:28	10.07	2	1	
24-Jul-13	14:34	10.08	170	58	
24-Jul-13	14:34	10.08	46	12	
24-Jul-13	14:35	10.08	2	1	
24-Jul-13	14:35	10.08	2	1	
24-Jul-13	14:41	10.09	68	26	
24-Jul-13	14:41	10.09	50	16	
24-Jul-13	14:41	10.09	102	42	
24-Jul-13	14:43	10.09	40	11	
24-Jul-13	15:00	10.40	45	10	
24-Jul-13	15:06	10.11	9	3	
24-Jul-13	15:07	10.11	3	0	
24-Jul-13	15:14	10.14	22	4	
24-Jul-13	15:14	10.14	5	2	
24-Jul-13	15:17	10.14	7	2	
24-Jul-13	15:17	10.14	23	3	
24-Jul-13	15:17	10.14	12	2	
24-Jul-13	16:00	10.89	160	13	Tug "Vulcan" with logbooms 47°11' 1.1" N 122° 48' 6.8" W
24-Jul-13	16:15	10.18	1	0	
24-Jul-13	16:15	10.18	7	1	
24-Jul-13	16:15	10.18	5	1	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

Date	Time	Sitecode*	Count	Pups	Remarks
24-Jul-13	16:15	10.18	2	1	
24-Jul-13	16:15	10.18	31	3	
24-Jul-13	16:15	10.18	2	1	
24-Jul-13	16:15	10.18	2	1	
24-Jul-13	16:17	10.18	36	3	
24-Jul-13	16:18	10.18	9	2	
24-Jul-13	16:18	10.18	2	1	
24-Jul-13	16:18	10.18	2	1	
24-Jul-13	16:18	10.18	2	1	
24-Jul-13	16:39	10.00	53	18	new = logbooms at Suldán's Marina in Sinclair Inlet
24-Jul-13	16:39	10.00	4	2	new = logbooms at Suldán's Marina in Sinclair Inlet
24-Jul-13	16:39	10.00	6	2	new = logbooms at Suldán's Marina in Sinclair Inlet
24-Jul-13	16:39	10.00	10	4	new = logbooms at Suldán's Marina in Sinclair Inlet
24-Jul-13	16:39	10.00	4	1	new = logbooms at Suldán's Marina in Sinclair Inlet
<b>Total</b>			<b>6136</b>	<b>1387</b>	
25-Jul-13	13:26	5.22	23	0	
25-Jul-13	13:42	6.03	24	1	
25-Jul-13	13:54	6.08	4	0	
25-Jul-13	14:00	6.09	2	1	
25-Jul-13	14:03	6.10	9	1	
25-Jul-13	14:14	7.03	75	10	
25-Jul-13	14:22	7.06	70	23	
25-Jul-13	14:22	7.06	93	18	
25-Jul-13	14:22	7.06	375	151	
25-Jul-13	14:25	7.06	30	14	
25-Jul-13	14:28	7.06	7	3	
25-Jul-13	14:29	7.05	123	24	
25-Jul-13	14:30	7.05	186	51	
25-Jul-13	14:30	7.05	56	10	
25-Jul-13	14:46	11.22	10	1	
25-Jul-13	14:46	11.22	11	1	
25-Jul-13	14:46	11.22	36	3	
25-Jul-13	14:46	11.22	10	5	
25-Jul-13	14:46	11.22	2	1	
25-Jul-13	14:46	11.22	30	4	
25-Jul-13	14:46	11.22	21	4	
25-Jul-13	14:46	11.22	11	4	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

Date	Time	Sitecode*	Count	Pups	Remarks
25-Jul-13	14:46	11.22	5	1	
25-Jul-13	14:46	11.22	4	2	
25-Jul-13	14:46	11.22	2	1	
25-Jul-13	14:50	11.19	14	1	
25-Jul-13	14:50	11.19	7	1	
25-Jul-13	14:50	11.19	2	1	
25-Jul-13	14:52	11.19	39	1	
25-Jul-13	14:53	11.18	29	5	
25-Jul-13	14:59	11.26	11	3	
25-Jul-13	15:02	11.25	10	3	
25-Jul-13	15:03	11.27	3	1	
25-Jul-13	15:03	11.27	4	1	
25-Jul-13	15:03	11.27	2	1	
25-Jul-13	15:03	11.27	13	2	
25-Jul-13	15:03	11.27	39	7	
25-Jul-13	15:06	11.34	0	0	
<b>Total</b>			<b>1392</b>	<b>361</b>	
26-Jul-13	10:39	5.22	58	5	
26-Jul-13	10:47	6.01	5	0	
26-Jul-13	10:49	6.02	4	0	
26-Jul-13	10:49	6.02	5	1	
26-Jul-13	10:50	6.02	19	2	
26-Jul-13	10:50	6.02	5	1	
26-Jul-13	10:59	6.04	10	0	
26-Jul-13	11:04	6.04	9	2	
26-Jul-13	11:05	6.06	31	9	
26-Jul-13	11:09	6.13	100	7	
26-Jul-13	11:09	6.13	3	0	
26-Jul-13	11:11	6.07	5	1	
26-Jul-13	11:11	6.07	3	0	
26-Jul-13	11:11	6.07	18	1	
26-Jul-13	11:11	6.07	4	1	
26-Jul-13	11:11	6.07	5	0	
26-Jul-13	11:11	6.07	11	0	
26-Jul-13	11:13	6.14	8	2	
26-Jul-13	11:13	6.14	3	1	
26-Jul-13	11:13	6.14	4	1	
26-Jul-13	11:13	6.14	1	0	
26-Jul-13	11:13	6.14	2	1	
26-Jul-13	11:13	6.14	5	1	
26-Jul-13	11:13	6.14	4	1	
26-Jul-13	11:13	6.14	2	1	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

<b>Date</b>	<b>Time</b>	<b>Sitecode*</b>	<b>Count</b>	<b>Pups</b>	<b>Remarks</b>
26-Jul-13	11:17	6.08	2	1	
26-Jul-13	11:17	6.08	14	2	
26-Jul-13	11:17	6.08	36	1	
26-Jul-13	11:18	6.08	2	1	
26-Jul-13	11:21	6.08	18	4	
26-Jul-13	11:24	6.10	9	3	
26-Jul-13	11:24	6.10	4	2	
26-Jul-13	11:24	6.10	21	4	
26-Jul-13	11:46	7.08	21	3	
26-Jul-13	11:46	7.08	7	3	
26-Jul-13	11:46	7.08	20	4	
26-Jul-13	11:47	7.08	110	42	
26-Jul-13	11:47	7.08	162	12	
26-Jul-13	11:47	7.08	38	16	
26-Jul-13	11:50	7.07	121	53	
26-Jul-13	11:51	7.07	38	17	
26-Jul-13	11:52	7.07	89	34	
26-Jul-13	11:53	7.07	102	15	
26-Jul-13	11:54	7.07	25	12	
26-Jul-13	11:54	7.07	8	3	
26-Jul-13	11:54	7.07	8	2	
26-Jul-13	11:54	7.07	58	7	
26-Jul-13	11:54	7.07	42	9	
26-Jul-13	11:54	7.07	157	47	
26-Jul-13	12:06	11.27	91	18	
26-Jul-13	12:09	11.26	2	1	
26-Jul-13	12:09	11.26	10	0	
26-Jul-13	12:11	11.22	42	19	
26-Jul-13	12:12	11.22	109	33	
26-Jul-13	12:13	11.22	66	17	
26-Jul-13	12:14	11.21	7	1	
26-Jul-13	12:15	11.00	9	2	new site = S side of Decatur Is
26-Jul-13	12:17	11.19	76	24	
26-Jul-13	12:19	11.18	26	6	
26-Jul-13	12:22	11.14	7	1	
26-Jul-13	12:25	11.15	2	1	
26-Jul-13	12:25	11.15	6	1	
26-Jul-13	12:26	11.15	5	1	
26-Jul-13	12:30	11.36	4	2	
26-Jul-13	12:30	11.36	10	4	
26-Jul-13	12:30	11.36	5	2	
26-Jul-13	12:30	11.36	19	3	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

<b>Date</b>	<b>Time</b>	<b>Sitecode*</b>	<b>Count</b>	<b>Pups</b>	<b>Remarks</b>
26-Jul-13	12:34	11.07	6	3	
26-Jul-13	12:34	11.07	74	24	
26-Jul-13	12:35	11.07	38	17	
26-Jul-13	12:35	11.07	7	2	
26-Jul-13	12:35	11.07	4	2	
26-Jul-13	12:35	11.07	8	4	
26-Jul-13	12:35	11.07	29	6	
26-Jul-13	12:35	11.07	8	3	
26-Jul-13	12:35	11.07	4	2	
26-Jul-13	12:35	11.07	2	1	
26-Jul-13	12:35	11.07	21	5	
26-Jul-13	12:35	11.07	23	4	
26-Jul-13	12:37	11.06	12	5	
26-Jul-13	12:40	11.05	2	1	
26-Jul-13	12:40	11.05	6	2	
26-Jul-13	12:40	11.05	30	13	
26-Jul-13	12:40	11.05	4	2	
26-Jul-13	12:40	11.05	8	3	
26-Jul-13	12:46	9.13	93	31	
26-Jul-13	13:10	7.02	66	1	
26-Jul-13	13:12	7.03	55	9	
26-Jul-13	13:12	7.03	37	5	
26-Jul-13	13:17	7.04	4	1	
26-Jul-13	13:17	7.04	11	3	
26-Jul-13	13:22	7.06	31	13	
26-Jul-13	13:22	7.06	75	31	
26-Jul-13	13:23	7.06	80	9	
26-Jul-13	13:24	7.06	108	23	
26-Jul-13	13:25	7.06	5	1	
26-Jul-13	13:25	7.06	2	1	
26-Jul-13	13:25	7.06	25	10	
26-Jul-13	13:26	7.06	29	12	
26-Jul-13	13:26	7.06	379	155	
26-Jul-13	13:26	7.06	13	6	
26-Jul-13	13:30	7.05	9	2	
26-Jul-13	13:30	7.05	14	6	
26-Jul-13	13:33	7.05	281	71	
26-Jul-13	13:34	7.05	2	1	
26-Jul-13	13:34	7.05	104	16	
26-Jul-13	13:34	7.05	104	10	
26-Jul-13	13:47	6.12	4	0	
26-Jul-13	13:48	6.11	22	2	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

Date	Time	Sitecode*	Count	Pups	Remarks
26-Jul-13	13:48	6.11	14	2	
26-Jul-13	13:48	6.12	0	0	
<b>Total</b>			<b>3785</b>	<b>991</b>	
05-Aug-13	10:18	13.32	8	2	
05-Aug-13	10:18	13.32	3	0	
05-Aug-13	10:19	13.32	3	1	
05-Aug-13	10:19	13.32	3	0	
05-Aug-13	10:19	13.32	18	9	
05-Aug-13	10:19	13.32	7	0	
05-Aug-13	10:26	13.00	4	2	new = Smallpox Bay/San Juan County Park
05-Aug-13	10:27	13.00	3	1	new = Smallpox Bay/San Juan County Park
05-Aug-13	10:27	13.31	5	2	
05-Aug-13	10:27	13.31	8	3	
05-Aug-13	10:27	13.31	2	1	
05-Aug-13	10:33	13.28	21	4	
05-Aug-13	10:33	13.29	5	2	
05-Aug-13	10:34	13.29	33	11	
05-Aug-13	10:35	13.27	23	3	
05-Aug-13	10:37	13.25	83	12	
05-Aug-13	10:38	13.24	4	2	
05-Aug-13	10:38	13.24	3	1	
05-Aug-13	10:38	13.34	2	1	
05-Aug-13	10:38	13.34	2	1	
05-Aug-13	10:38	13.34	2	1	
05-Aug-13	10:38	13.34	11	5	
05-Aug-13	10:38	13.34	11	6	
05-Aug-13	10:38	13.34	2	1	
05-Aug-13	10:38	13.34	4	1	
05-Aug-13	10:39	13.34	2	1	
05-Aug-13	10:39	13.34	3	1	
05-Aug-13	10:39	13.34	2	1	
05-Aug-13	10:39	13.34	7	3	
05-Aug-13	10:39	13.34	4	1	
05-Aug-13	10:42	13.15	47	18	
05-Aug-13	10:42	13.15	6	2	
05-Aug-13	10:43	13.15	4	1	
05-Aug-13	10:43	13.15	8	3	
05-Aug-13	10:46	13.15	4	2	
05-Aug-13	10:48	13.16	8	3	
05-Aug-13	10:50	13.17	2	1	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

<b>Date</b>	<b>Time</b>	<b>Sitecode*</b>	<b>Count</b>	<b>Pups</b>	<b>Remarks</b>
05-Aug-13	10:50	13.17	1	0	
05-Aug-13	10:50	13.17	8	3	
05-Aug-13	10:50	13.17	4	2	
05-Aug-13	10:50	13.17	9	3	
05-Aug-13	10:50	13.17	4	1	
05-Aug-13	10:50	13.17	17	8	
05-Aug-13	10:52	13.17	85	38	
05-Aug-13	10:52	13.19	79	19	
05-Aug-13	10:55	13.18	56	17	
05-Aug-13	10:56	13.18	7	4	
05-Aug-13	10:56	13.18	5	3	
05-Aug-13	10:57	13.20	7	3	
05-Aug-13	10:57	13.20	2	1	
05-Aug-13	10:58	13.21	30	11	
05-Aug-13	10:58	13.21	2	1	
05-Aug-13	10:58	13.21	18	6	
05-Aug-13	10:58	13.21	5	2	
05-Aug-13	10:58	13.21	3	2	
05-Aug-13	10:58	13.21	24	6	
05-Aug-13	10:58	13.21	3	1	
05-Aug-13	11:01	13.14	3	1	
05-Aug-13	11:02	13.14	25	13	
05-Aug-13	11:02	13.14	53	30	
05-Aug-13	11:04	13.13	9	2	
05-Aug-13	11:04	13.13	14	6	
05-Aug-13	11:04	13.13	8	4	
05-Aug-13	11:04	13.13	8	4	
05-Aug-13	11:05	13.13	60	23	
05-Aug-13	11:05	13.13	8	4	
05-Aug-13	11:05	13.13	6	4	
05-Aug-13	11:05	13.13	10	6	
05-Aug-13	11:05	13.13	2	1	
05-Aug-13	11:05	13.13	2	1	
05-Aug-13	11:06	13.13	49	18	
05-Aug-13	11:06	13.13	4	2	
05-Aug-13	11:08	13.12	36	10	
05-Aug-13	11:08	13.12	186	47	
05-Aug-13	11:09	13.12	108	32	
05-Aug-13	11:09	13.12	8	4	
05-Aug-13	11:09	13.12	13	7	
05-Aug-13	11:13	13.11	119	42	
05-Aug-13	11:13	13.11	8	5	



*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

<b>Date</b>	<b>Time</b>	<b>Sitecode*</b>	<b>Count</b>	<b>Pups</b>	<b>Remarks</b>
05-Aug-13	11:15	13.11	86	15	
05-Aug-13	11:16	13.11	31	12	
05-Aug-13	11:16	13.11	29	12	
05-Aug-13	11:17	13.09	37	10	
05-Aug-13	11:17	13.11	3	1	
05-Aug-13	11:17	13.11	7	2	
05-Aug-13	11:18	13.08	2	1	
05-Aug-13	11:18	13.08	10	3	
05-Aug-13	11:18	13.08	10	3	
05-Aug-13	11:19	13.08	155	49	
05-Aug-13	11:21	13.07	14	2	
05-Aug-13	11:21	13.07	13	3	
05-Aug-13	11:21	13.07	11	3	
05-Aug-13	11:23	13.07	85	29	
05-Aug-13	11:25	13.07	0	0	
05-Aug-13	11:27	13.01	13	5	
05-Aug-13	11:28	13.04	217	47	
05-Aug-13	11:30	13.04	159	33	
05-Aug-13	11:32	13.02	71	25	
05-Aug-13	11:33	13.02	12	7	
05-Aug-13	11:33	13.02	39	15	
05-Aug-13	11:35	13.16	5	2	
05-Aug-13	11:35	13.16	13	3	
05-Aug-13	11:35	13.16	5	2	
05-Aug-13	11:35	13.16	13	4	
05-Aug-13	11:35	13.16	25	6	
05-Aug-13	11:35	13.16	9	3	
05-Aug-13	11:35	13.16	9	3	
05-Aug-13	11:38	11.01	2	1	
05-Aug-13	11:38	11.01	5	2	
05-Aug-13	11:38	11.01	2	1	
05-Aug-13	11:38	11.01	5	2	
05-Aug-13	11:39	11.01	67	27	
05-Aug-13	11:40	11.01	38	14	
05-Aug-13	11:40	11.01	17	10	
05-Aug-13	11:40	11.01	8	3	
05-Aug-13	11:40	11.01	4	2	
05-Aug-13	11:41	11.01	29	11	
05-Aug-13	11:41	11.01	14	3	
05-Aug-13	11:42	11.02	76	28	
05-Aug-13	11:42	11.02	123	43	
05-Aug-13	11:43	11.03	8	3	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

<b>Date</b>	<b>Time</b>	<b>Sitecode*</b>	<b>Count</b>	<b>Pups</b>	<b>Remarks</b>
05-Aug-13	11:44	11.03	43	15	
05-Aug-13	11:44	11.03	30	9	
05-Aug-13	11:45	13.06	16	3	
05-Aug-13	11:45	13.06	4	2	
05-Aug-13	11:45	13.06	7	3	
05-Aug-13	11:45	13.06	3	1	
05-Aug-13	11:45	13.06	3	2	
05-Aug-13	11:51	11.05	10	5	
05-Aug-13	11:51	11.05	7	2	
05-Aug-13	11:51	11.05	5	1	
05-Aug-13	11:51	11.05	1	0	
05-Aug-13	11:52	11.06	4	2	
05-Aug-13	11:52	11.06	10	7	
05-Aug-13	11:52	11.06	6	2	
05-Aug-13	11:52	11.06	8	3	
05-Aug-13	11:52	11.06	6	2	
05-Aug-13	11:52	11.06	2	1	
05-Aug-13	11:53	11.07	12	3	
05-Aug-13	11:53	11.07	5	2	
05-Aug-13	11:53	11.07	12	5	
05-Aug-13	11:53	11.07	4	2	
05-Aug-13	11:53	11.07	28	12	
05-Aug-13	11:53	11.07	6	2	
05-Aug-13	11:53	11.07	3	1	
05-Aug-13	11:53	11.07	2	1	
05-Aug-13	11:53	11.07	2	1	
05-Aug-13	11:53	11.07	4	2	
05-Aug-13	11:53	11.07	4	2	
05-Aug-13	11:53	11.07	23	10	
05-Aug-13	11:55	11.07	57	13	
05-Aug-13	11:55	11.07	14	2	
05-Aug-13	11:55	11.07	17	4	
05-Aug-13	11:55	11.07	8	3	
05-Aug-13	11:55	11.07	12	5	
05-Aug-13	11:56	11.04	7	4	
05-Aug-13	11:56	11.04	15	2	
05-Aug-13	11:56	11.04	24	4	
05-Aug-13	11:56	11.04	5	2	
05-Aug-13	12:09	9.02	2	0	
05-Aug-13	12:09	9.02	1	0	
05-Aug-13	12:13	9.04	92	30	
05-Aug-13	12:14	9.04	185	40	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

<b>Date</b>	<b>Time</b>	<b>Sitecode*</b>	<b>Count</b>	<b>Pups</b>	<b>Remarks</b>
05-Aug-13	12:17	9.05	51	17	
05-Aug-13	12:18	9.13	2	1	
05-Aug-13	12:19	9.05	6	1	
05-Aug-13	12:19	9.05	3	1	
05-Aug-13	12:19	9.05	34	12	
05-Aug-13	12:27	9.07	30	12	
05-Aug-13	12:27	9.08	10	1	
05-Aug-13	12:27	9.08	19	0	
05-Aug-13	12:28	9.08	64	1	
05-Aug-13	12:42	9.13	5	2	
05-Aug-13	12:45	9.12	27	9	
05-Aug-13	12:50	9.15	27	4	
05-Aug-13	12:50	9.15	3	1	
05-Aug-13	12:50	9.15	8	4	
05-Aug-13	12:50	9.15	5	2	
05-Aug-13	12:50	9.15	7	2	
05-Aug-13	12:59	9.19	65	12	
05-Aug-13	13:03	9.21	153	48	
05-Aug-13	13:11	9.23	80	21	
05-Aug-13	13:11	9.24	3	1	
05-Aug-13	13:11	9.24	4	2	
05-Aug-13	13:11	9.24	14	2	
05-Aug-13	13:14	9.25	83	17	
05-Aug-13	13:14	9.28	14	2	
05-Aug-13	13:14	9.28	26	9	
05-Aug-13	13:14	9.28	5	2	
05-Aug-13	13:26	11.37	8	4	
05-Aug-13	13:26	11.37	12	3	
05-Aug-13	13:27	11.37	32	5	
05-Aug-13	13:29	11.17	6	3	
05-Aug-13	13:29	11.17	2	1	
05-Aug-13	13:29	11.17	2	1	
05-Aug-13	13:29	11.17	8	3	
05-Aug-13	13:29	11.17	2	1	
05-Aug-13	13:29	11.17	16	4	
05-Aug-13	13:29	11.17	2	1	
05-Aug-13	13:29	11.17	8	2	
05-Aug-13	13:29	11.17	18	3	
05-Aug-13	13:29	11.17	23	5	
05-Aug-13	13:32	9.17	12	3	
05-Aug-13	13:32	9.17	3	1	
05-Aug-13	13:32	9.17	2	1	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

<b>Date</b>	<b>Time</b>	<b>Sitecode*</b>	<b>Count</b>	<b>Pups</b>	<b>Remarks</b>
05-Aug-13	13:32	9.17	3	1	
05-Aug-13	13:32	9.17	3	1	
05-Aug-13	13:32	9.17	21	3	
05-Aug-13	13:36	11.36	14	2	
05-Aug-13	13:36	11.36	5	1	
05-Aug-13	13:36	11.36	2	1	
05-Aug-13	13:42	11.10	4	2	
05-Aug-13	13:42	11.10	20	8	
05-Aug-13	13:42	11.10	2	1	
05-Aug-13	13:42	11.10	5	2	
05-Aug-13	13:42	11.10	7	2	
05-Aug-13	13:42	11.10	2	1	
05-Aug-13	13:43	11.09	2	1	
05-Aug-13	13:43	11.09	10	3	
05-Aug-13	13:43	11.09	5	2	
05-Aug-13	13:43	11.09	5	2	
05-Aug-13	13:43	11.09	4	1	
05-Aug-13	13:43	11.09	11	3	
05-Aug-13	13:43	11.11	2	1	
05-Aug-13	13:43	11.11	4	2	
05-Aug-13	13:43	11.11	2	1	
05-Aug-13	13:43	11.11	2	1	
05-Aug-13	13:43	11.11	30	9	
05-Aug-13	13:47	11.38	15	7	
05-Aug-13	13:48	11.35	2	1	
05-Aug-13	13:48	11.35	2	1	
05-Aug-13	13:48	11.35	6	2	
05-Aug-13	13:51	11.18	12	2	
05-Aug-13	13:52	11.19	3	1	
05-Aug-13	13:52	11.19	16	2	
05-Aug-13	13:52	11.19	12	3	
05-Aug-13	13:54	12.42	7	3	
05-Aug-13	13:54	12.42	2	1	
05-Aug-13	13:55	12.41	14	3	
05-Aug-13	14:12	7.06	129	16	
05-Aug-13	14:12	7.06	94	42	
05-Aug-13	14:13	7.06	15	0	
05-Aug-13	14:13	7.06	12	4	
05-Aug-13	14:13	7.06	2	1	
05-Aug-13	14:13	7.06	49	18	
05-Aug-13	14:13	7.06	19	8	
05-Aug-13	14:13	7.06	430	179	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

Date	Time	Sitecode*	Count	Pups	Remarks
05-Aug-13	14:19	7.05	439	128	
05-Aug-13	14:19	7.05	2	1	
<b>Total</b>			<b>6016</b>	<b>1869</b>	
06-Aug-13	10:37	9.36	9	3	
06-Aug-13	10:38	9.36	24	10	
06-Aug-13	10:43	9.37	6	0	
06-Aug-13	10:43	9.37	22	3	
06-Aug-13	10:43	9.37	2	1	
06-Aug-13	10:43	9.37	2	1	
06-Aug-13	10:43	9.37	4	2	
06-Aug-13	10:43	9.37	2	1	
06-Aug-13	10:43	9.37	3	1	
06-Aug-13	10:43	9.37	2	1	
06-Aug-13	10:51	10.31	3	1	Erratic off Possession Pt
06-Aug-13	11:08	10.02	2	1	
06-Aug-13	11:08	10.02	43	9	
06-Aug-13	11:13	10.00	68	10	new = Orchard Rocks
06-Aug-13	11:23	10.00	10	2	new = logbooms at Suldan's Marina in Sinclair Inlet
06-Aug-13	11:32	10.01	8	3	
06-Aug-13	11:34	10.01	2	1	
06-Aug-13	11:34	10.01	6	3	
06-Aug-13	11:34	10.01	42	6	
06-Aug-13	11:54	10.18	12	3	
06-Aug-13	11:55	10.18	0	0	
06-Aug-13	12:10	10.06	385	108	
06-Aug-13	12:10	10.06	6	3	
06-Aug-13	12:16	10.03	0	0	
06-Aug-13	12:21	10.07	90	17	
06-Aug-13	12:21	10.07	2	1	
06-Aug-13	12:21	10.07	4	2	
06-Aug-13	12:28	10.08	24	10	
06-Aug-13	12:28	10.08	11	5	
06-Aug-13	12:28	10.08	188	61	
06-Aug-13	12:28	10.08	9	3	
06-Aug-13	12:28	10.08	5	4	
06-Aug-13	12:39	10.09	153	46	
06-Aug-13	12:39	10.09	38	11	
06-Aug-13	12:39	10.09	47	8	
06-Aug-13	12:39	10.09	4	2	
06-Aug-13	12:45	10.12	4	1	
06-Aug-13	12:45	10.12	34	4	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

<b>Date</b>	<b>Time</b>	<b>Sitecode*</b>	<b>Count</b>	<b>Pups</b>	<b>Remarks</b>
06-Aug-13	12:45	10.12	2	1	
06-Aug-13	12:45	10.12	2	1	
06-Aug-13	12:45	10.12	19	6	
06-Aug-13	12:45	10.12	2	1	
06-Aug-13	12:56	10.40	58	11	
06-Aug-13	12:56	10.40	8	2	
06-Aug-13	13:03	10.11	5	2	
06-Aug-13	13:03	10.11	16	3	
06-Aug-13	13:04	10.11	7	2	
06-Aug-13	13:11	10.14	2	1	
06-Aug-13	13:11	10.14	6	2	
06-Aug-13	13:11	10.14	4	0	
06-Aug-13	13:11	10.14	4	2	
06-Aug-13	13:11	10.14	20	6	
06-Aug-13	13:11	10.14	2	1	
06-Aug-13	13:11	10.14	2	1	
06-Aug-13	13:12	10.14	6	3	
06-Aug-13	13:12	10.14	2	1	
06-Aug-13	13:12	10.14	3	1	
06-Aug-13	13:12	10.14	6	3	
06-Aug-13	13:12	10.14	11	3	
06-Aug-13	13:12	10.14	4	2	
06-Aug-13	13:12	10.14	3	1	
06-Aug-13	13:12	10.14	21	3	
06-Aug-13	13:12	10.14	24	9	
06-Aug-13	13:16	10.14	2	1	
06-Aug-13	13:41	8.02	5	1	
06-Aug-13	13:41	8.02	15	1	
06-Aug-13	13:53	7.15	6	2	
06-Aug-13	13:53	7.15	4	2	
06-Aug-13	13:53	7.15	14	4	
06-Aug-13	13:57	7.15	4	1	
06-Aug-13	13:58	7.15	55	9	
06-Aug-13	13:58	7.15	0	0	
06-Aug-13	14:06	7.09	13	3	
06-Aug-13	14:06	7.09	25	12	
06-Aug-13	14:15	7.06	10	4	
06-Aug-13	14:15	7.06	56	9	
06-Aug-13	14:15	7.06	113	30	
06-Aug-13	14:17	7.06	457	163	
06-Aug-13	14:17	7.06	33	13	
06-Aug-13	14:17	7.06	14	7	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

<b>Date</b>	<b>Time</b>	<b>Sitecode*</b>	<b>Count</b>	<b>Pups</b>	<b>Remarks</b>
06-Aug-13	14:22	7.05	308	111	
06-Aug-13	14:22	7.05	12	9	
06-Aug-13	14:22	7.05	2	1	
06-Aug-13	14:29	7.02	58	9	
06-Aug-13	14:32	7.03	81	27	
06-Aug-13	14:32	7.03	36	7	
06-Aug-13	14:43	6.12	7	3	
06-Aug-13	14:43	6.12	24	2	
06-Aug-13	14:43	6.12	4	2	
06-Aug-13	14:43	6.12	3	1	
06-Aug-13	14:43	6.12	4	2	
06-Aug-13	14:43	6.12	4	1	
06-Aug-13	14:43	6.12	27	8	
06-Aug-13	14:45	6.12	2	1	
06-Aug-13	14:45	6.12	4	1	
06-Aug-13	14:45	6.12	10	3	
06-Aug-13	14:45	6.12	2	1	
06-Aug-13	14:45	6.12	5	2	
06-Aug-13	14:45	6.12	4	2	
06-Aug-13	14:45	6.12	2	1	
06-Aug-13	14:45	6.12	3	1	
06-Aug-13	14:45	6.12	58	10	
<b>Total</b>			<b>3001</b>	<b>883</b>	
07-Aug-13	11:49	7.09	58	14	
07-Aug-13	11:59	9.34	10	3	
07-Aug-13	11:59	9.34	60	11	
07-Aug-13	11:59	9.34	10	3	
07-Aug-13	11:59	9.34	8	3	
07-Aug-13	11:59	9.34	8	2	
07-Aug-13	12:04	9.34	15	6	
07-Aug-13	12:04	9.34	2	1	
07-Aug-13	12:06	9.34	68	11	
07-Aug-13	12:08	9.34	24	9	
07-Aug-13	12:08	9.34	38	12	
07-Aug-13	12:12	9.32	41	14	
07-Aug-13	12:14	9.32	6	2	
07-Aug-13	12:14	9.32	107	35	
07-Aug-13	12:19	9.39	1	0	
07-Aug-13	12:24	9.39	22	2	
07-Aug-13	12:24	9.39	7	3	
07-Aug-13	12:24	9.39	3	1	
07-Aug-13	12:24	9.39	10	2	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

Date	Time	Sitecode*	Count	Pups	Remarks
07-Aug-13	12:24	9.39	2	1	
07-Aug-13	12:34	9.31	8	3	
07-Aug-13	12:34	9.31	4	2	
07-Aug-13	12:34	9.31	52	8	
07-Aug-13	12:36	9.31	10	3	
07-Aug-13	12:40	9.31	18	8	
07-Aug-13	12:40	9.31	2	1	
07-Aug-13	12:40	9.31	21	8	
07-Aug-13	12:40	9.31	18	4	
07-Aug-13	12:40	9.31	109	34	
07-Aug-13	12:45	9.31	63	17	
07-Aug-13	12:46	9.31	29	9	
07-Aug-13	12:46	9.31	42	16	
07-Aug-13	12:49	9.31	17	7	
07-Aug-13	12:49	9.31	20	4	
07-Aug-13	12:50	9.31	42	9	
07-Aug-13	12:50	9.31	2	1	
07-Aug-13	12:50	9.31	8	1	
07-Aug-13	12:59	9.29	57	10	
07-Aug-13	13:03	9.28	87	11	
07-Aug-13	13:08	9.25	39	12	
07-Aug-13	13:08	9.25	106	31	
07-Aug-13	13:10	9.24	4	1	
07-Aug-13	13:10	9.24	31	9	
07-Aug-13	13:12	9.23	45	15	
07-Aug-13	13:12	9.23	4	2	
07-Aug-13	13:12	9.23	21	7	
07-Aug-13	13:12	9.23	17	2	
07-Aug-13	13:16	9.00	6	0	new = Hat/Saddlebag/Huckleberry Islands in Padilla Bay
07-Aug-13	13:19	9.21	163	53	
07-Aug-13	13:25	9.19	60	8	
07-Aug-13	13:25	9.19	21	7	
07-Aug-13	13:32	9.17	132	19	
07-Aug-13	13:32	9.17	2	1	
07-Aug-13	13:32	9.17	21	4	
07-Aug-13	13:32	11.17	23	2	
07-Aug-13	13:32	11.17	8	3	
07-Aug-13	13:32	11.17	7	2	
07-Aug-13	13:32	11.17	2	1	
07-Aug-13	13:32	11.17	6	2	
07-Aug-13	13:32	11.17	17	4	



*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

<b>Date</b>	<b>Time</b>	<b>Sitecode*</b>	<b>Count</b>	<b>Pups</b>	<b>Remarks</b>
07-Aug-13	13:32	11.17	20	3	
07-Aug-13	13:32	11.17	15	6	
07-Aug-13	13:37	11.37	4	1	
07-Aug-13	13:37	11.37	5	1	
07-Aug-13	13:37	11.37	14	4	
07-Aug-13	13:38	11.37	22	6	
07-Aug-13	13:38	11.37	2	1	
07-Aug-13	13:38	11.37	3	1	
07-Aug-13	13:42	11.15	6	1	
07-Aug-13	13:42	11.15	5	2	
07-Aug-13	13:42	11.15	1	0	
07-Aug-13	13:42	11.15	4	1	
07-Aug-13	13:44	11.15	2	1	
07-Aug-13	13:46	11.14	17	3	
07-Aug-13	13:47	11.11	6	1	
07-Aug-13	13:47	11.11	10	3	
07-Aug-13	13:47	11.11	2	1	
07-Aug-13	13:47	11.11	9	2	
07-Aug-13	13:47	11.11	28	6	
07-Aug-13	13:49	11.09	75	19	
07-Aug-13	13:49	11.11	6	2	
07-Aug-13	13:53	11.10	5	2	
07-Aug-13	13:53	11.10	21	3	
07-Aug-13	13:53	11.10	3	1	
07-Aug-13	13:53	11.10	6	2	
07-Aug-13	13:53	11.10	13	1	
07-Aug-13	13:53	11.10	3	1	
07-Aug-13	13:53	11.10	10	3	
07-Aug-13	13:53	11.10	29	11	
07-Aug-13	13:53	11.10	17	8	
07-Aug-13	13:53	11.10	4	2	
07-Aug-13	14:00	12.15	5	2	
07-Aug-13	14:02	12.16	17	2	
07-Aug-13	14:02	12.16	5	2	
07-Aug-13	14:04	12.18	11	5	
07-Aug-13	14:05	12.20	7	2	
07-Aug-13	14:06	12.22	4	2	
07-Aug-13	14:06	12.22	4	2	
07-Aug-13	14:07	12.23	35	6	
07-Aug-13	14:07	12.23	42	7	
07-Aug-13	14:08	12.23	12	2	
07-Aug-13	14:08	12.23	2	1	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

<b>Date</b>	<b>Time</b>	<b>Sitecode*</b>	<b>Count</b>	<b>Pups</b>	<b>Remarks</b>
07-Aug-13	14:10	12.25	25	4	
07-Aug-13	14:12	12.26	5	2	
07-Aug-13	14:12	12.27	9	3	
07-Aug-13	14:14	12.32	4	1	
07-Aug-13	14:14	12.32	2	1	
07-Aug-13	14:15	12.50	21	2	
07-Aug-13	14:15	12.50	6	4	
07-Aug-13	14:15	12.50	2	1	
07-Aug-13	14:15	12.50	2	1	
07-Aug-13	14:17	12.34	21	2	
07-Aug-13	14:17	12.34	16	5	
07-Aug-13	14:17	12.34	5	1	
07-Aug-13	14:17	12.34	26	6	
07-Aug-13	14:19	12.29	2	1	
07-Aug-13	14:19	12.29	6	2	
07-Aug-13	14:19	12.29	5	2	
07-Aug-13	14:19	12.29	17	7	
07-Aug-13	14:21	12.48	5	2	
07-Aug-13	14:29	12.14	68	20	
07-Aug-13	14:29	13.28	6	2	
07-Aug-13	14:29	13.28	3	1	
07-Aug-13	14:29	13.28	2	1	
07-Aug-13	14:30	12.10	9	2	
07-Aug-13	14:30	12.10	44	8	
07-Aug-13	14:31	12.09	6	3	
07-Aug-13	14:31	12.09	10	2	
07-Aug-13	14:31	12.09	2	1	
07-Aug-13	14:32	12.05	14	3	
07-Aug-13	14:32	12.07	4	1	
07-Aug-13	14:32	12.07	7	2	
07-Aug-13	14:35	12.01	18	3	
07-Aug-13	14:36	11.31	12	2	
07-Aug-13	14:36	12.03	5	2	
07-Aug-13	14:38	11.30	5	1	
07-Aug-13	14:38	11.30	10	1	
07-Aug-13	14:38	11.31	6	2	
07-Aug-13	14:41	11.28	2	1	
07-Aug-13	14:42	7.08	10	2	
07-Aug-13	14:42	11.29	21	2	
07-Aug-13	14:42	11.29	4	1	
07-Aug-13	14:42	11.29	7	2	
07-Aug-13	14:42	11.29	3	1	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

<b>Date</b>	<b>Time</b>	<b>Sitecode*</b>	<b>Count</b>	<b>Pups</b>	<b>Remarks</b>
07-Aug-13	14:42	11.29	12	2	
07-Aug-13	14:42	11.29	3	0	
07-Aug-13	14:47	7.08	8	2	
07-Aug-13	14:47	7.08	12	4	
07-Aug-13	14:48	7.08	51	16	
07-Aug-13	14:49	7.08	177	54	
07-Aug-13	14:51	7.08	120	13	
07-Aug-13	14:51	7.08	40	13	
07-Aug-13	14:53	7.07	22	8	
07-Aug-13	14:53	7.07	20	6	
07-Aug-13	14:53	7.07	40	15	
07-Aug-13	14:53	7.07	189	79	
07-Aug-13	14:53	7.07	69	29	
07-Aug-13	14:53	7.07	25	12	
07-Aug-13	14:53	7.07	18	7	
07-Aug-13	14:53	7.07	60	25	
07-Aug-13	15:07	7.02	99	5	
07-Aug-13	15:10	7.03	186	60	
07-Aug-13	15:19	6.11	8	2	
07-Aug-13	15:19	6.11	25	6	
07-Aug-13	15:19	6.11	12	2	
07-Aug-13	15:20	6.11	4	2	
07-Aug-13	15:20	6.11	3	1	
07-Aug-13	15:20	6.11	7	2	
07-Aug-13	15:22	6.12	5	1	
07-Aug-13	15:22	6.12	3	1	
07-Aug-13	15:22	6.12	8	2	
07-Aug-13	15:22	6.12	3	1	
07-Aug-13	15:25	6.12	76	10	
<b>Total</b>			<b>4117</b>	<b>1101</b>	
08-Aug-13	11:30	7.08	6	2	
08-Aug-13	11:30	7.08	2	1	
08-Aug-13	11:30	7.08	6	2	
08-Aug-13	11:30	7.08	68	18	
08-Aug-13	11:30	7.08	5	3	
08-Aug-13	11:30	7.08	14	6	
08-Aug-13	11:30	7.08	2	1	
08-Aug-13	11:31	7.08	130	40	
08-Aug-13	11:31	7.08	236	11	
08-Aug-13	11:31	7.08	6	2	
08-Aug-13	11:33	7.07	6	2	
08-Aug-13	11:33	7.07	6	3	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

Date	Time	Sitecode*	Count	Pups	Remarks
08-Aug-13	11:34	7.07	60	22	
08-Aug-13	11:34	7.07	45	15	
08-Aug-13	11:34	7.08	20	3	
08-Aug-13	11:35	7.07	30	14	
08-Aug-13	11:35	7.07	219	65	
08-Aug-13	11:35	7.07	15	7	
08-Aug-13	11:37	7.07	64	13	
08-Aug-13	11:37	7.07	193	67	
08-Aug-13	11:46	11.00	0	0	new = Deception Island/Bowman Bay
08-Aug-13	11:48	11.00	57	12	new = reef in Langley Bay/east of Biz Point
08-Aug-13	11:48	11.00	4	2	new = reef in Langley Bay/east of Biz Point
08-Aug-13	11:49	11.27	4	2	
08-Aug-13	11:49	11.27	15	5	
08-Aug-13	11:50	11.27	72	11	
08-Aug-13	11:51	11.27	55	7	
08-Aug-13	11:51	11.27	3	1	
08-Aug-13	11:53	11.26	16	2	
08-Aug-13	11:54	11.22	6	2	
08-Aug-13	11:54	11.22	8	1	
08-Aug-13	11:56	11.22	48	15	
08-Aug-13	11:56	11.22	6	2	
08-Aug-13	11:56	11.22	4	2	
08-Aug-13	11:56	11.22	23	6	
08-Aug-13	11:57	11.22	121	33	
08-Aug-13	11:58	11.21	7	0	
08-Aug-13	12:02	11.19	88	15	
08-Aug-13	12:04	11.18	42	7	
08-Aug-13	12:06	11.00	7	2	new = James Island
08-Aug-13	12:07	12.42	2	1	
08-Aug-13	12:09	12.41	3	1	
08-Aug-13	12:09	12.41	3	2	
08-Aug-13	12:09	12.41	41	10	
08-Aug-13	12:13	12.37	3	1	
08-Aug-13	12:13	12.37	13	3	
08-Aug-13	12:13	12.37	6	1	
08-Aug-13	12:13	12.37	2	1	
08-Aug-13	12:13	12.37	2	1	
08-Aug-13	12:13	12.37	4	1	
08-Aug-13	12:13	12.37	12	3	
08-Aug-13	12:13	12.41	10	2	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

<b>Date</b>	<b>Time</b>	<b>Sitecode*</b>	<b>Count</b>	<b>Pups</b>	<b>Remarks</b>
08-Aug-13	12:14	12.38	7	3	
08-Aug-13	12:15	12.39	4	2	
08-Aug-13	12:15	12.39	4	2	
08-Aug-13	12:15	12.39	15	4	
08-Aug-13	12:15	12.39	3	1	
08-Aug-13	12:19	12.40	58	13	
08-Aug-13	12:19	12.49	3	1	
08-Aug-13	12:19	12.49	5	2	
08-Aug-13	12:20	12.49	2	1	
08-Aug-13	12:20	12.49	22	8	
08-Aug-13	12:21	12.00	25	7	
08-Aug-13	12:26	11.35	23	6	
08-Aug-13	12:29	11.14	30	10	
08-Aug-13	12:31	11.12	32	11	
08-Aug-13	12:32	11.12	35	10	
08-Aug-13	12:34	11.11	7	3	
08-Aug-13	12:34	11.11	14	4	
08-Aug-13	12:34	11.11	2	1	
08-Aug-13	12:34	11.11	5	4	
08-Aug-13	12:34	11.11	6	2	
08-Aug-13	12:35	11.11	31	10	
08-Aug-13	12:36	11.09	96	18	
08-Aug-13	12:36	11.10	3	1	
08-Aug-13	12:36	11.10	2	1	
08-Aug-13	12:36	11.10	6	2	
08-Aug-13	12:36	11.10	18	7	
08-Aug-13	12:36	11.10	2	1	
08-Aug-13	12:36	11.10	5	1	
08-Aug-13	12:36	11.10	2	1	
08-Aug-13	12:36	11.10	2	1	
08-Aug-13	12:36	11.10	2	1	
08-Aug-13	12:36	11.10	9	4	
08-Aug-13	12:36	11.10	79	20	
08-Aug-13	12:45	11.04	165	33	
08-Aug-13	12:45	11.04	2	1	
08-Aug-13	12:45	11.04	2	1	
08-Aug-13	12:48	11.07	8	4	
08-Aug-13	12:49	11.07	52	18	
08-Aug-13	12:49	11.07	9	2	
08-Aug-13	12:49	11.07	7	2	
08-Aug-13	12:50	11.07	25	11	
08-Aug-13	12:50	11.07	34	9	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

<b>Date</b>	<b>Time</b>	<b>Sitecode*</b>	<b>Count</b>	<b>Pups</b>	<b>Remarks</b>
08-Aug-13	12:50	11.07	18	3	
08-Aug-13	12:50	11.07	13	5	
08-Aug-13	12:50	11.07	20	9	
08-Aug-13	12:50	11.07	6	2	
08-Aug-13	12:50	11.07	22	8	
08-Aug-13	12:50	11.07	12	3	
08-Aug-13	12:52	11.05	2	1	
08-Aug-13	12:52	11.05	4	2	
08-Aug-13	12:52	11.06	2	1	
08-Aug-13	12:52	11.06	17	8	
08-Aug-13	12:52	11.06	3	1	
08-Aug-13	12:54	11.05	24	6	
08-Aug-13	12:54	11.05	4	2	
08-Aug-13	12:58	13.06	5	2	
08-Aug-13	12:59	13.06	54	22	
08-Aug-13	12:59	13.06	2	1	
08-Aug-13	13:01	11.01	10	3	
08-Aug-13	13:01	11.01	37	17	
08-Aug-13	13:01	13.06	12	3	
08-Aug-13	13:02	11.01	6	2	
08-Aug-13	13:02	11.01	18	8	
08-Aug-13	13:02	11.01	60	24	
08-Aug-13	13:02	11.01	4	1	
08-Aug-13	13:02	11.01	3	1	
08-Aug-13	13:02	11.01	5	3	
08-Aug-13	13:02	11.01	2	1	
08-Aug-13	13:02	11.01	7	3	
08-Aug-13	13:02	11.01	12	6	
08-Aug-13	13:05	11.02	151	41	
08-Aug-13	13:05	11.02	6	2	
08-Aug-13	13:05	11.02	3	1	
08-Aug-13	13:05	11.02	6	2	
08-Aug-13	13:05	11.02	4	1	
08-Aug-13	13:07	11.03	18	4	
08-Aug-13	13:07	11.03	74	23	
08-Aug-13	13:11	13.04	145	35	
08-Aug-13	13:11	13.04	224	40	
08-Aug-13	13:16	13.02	57	21	
08-Aug-13	13:16	13.02	9	5	
08-Aug-13	13:16	13.02	57	17	
08-Aug-13	13:17	13.16	19	10	
08-Aug-13	13:17	13.16	2	1	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

<b>Date</b>	<b>Time</b>	<b>Sitecode*</b>	<b>Count</b>	<b>Pups</b>	<b>Remarks</b>
08-Aug-13	13:17	13.16	2	1	
08-Aug-13	13:17	13.16	13	6	
08-Aug-13	13:17	13.16	4	2	
08-Aug-13	13:17	13.16	10	3	
08-Aug-13	13:21	13.16	36	18	
08-Aug-13	13:24	13.01	3	1	
08-Aug-13	13:24	13.01	6	0	
08-Aug-13	13:27	13.07	48	12	
08-Aug-13	13:28	13.07	54	15	
08-Aug-13	13:32	13.36	0	0	
08-Aug-13	13:34	13.36	48	14	
08-Aug-13	13:34	13.36	2	1	
08-Aug-13	13:37	13.08	2	1	
08-Aug-13	13:37	13.08	2	1	
08-Aug-13	13:38	13.11	12	3	
08-Aug-13	13:38	13.11	5	2	
08-Aug-13	13:38	13.11	9	2	
08-Aug-13	13:38	13.11	15	7	
08-Aug-13	13:38	13.11	4	2	
08-Aug-13	13:38	13.11	3	1	
08-Aug-13	13:38	13.11	31	11	
08-Aug-13	13:38	13.11	13	3	
08-Aug-13	13:38	13.11	10	2	
08-Aug-13	13:43	13.11	118	21	
08-Aug-13	13:48	13.12	35	11	
08-Aug-13	13:48	13.12	30	6	
08-Aug-13	13:49	13.12	134	33	
08-Aug-13	13:49	13.12	4	2	
08-Aug-13	13:49	13.12	3	1	
08-Aug-13	13:49	13.12	5	2	
08-Aug-13	13:49	13.12	11	4	
08-Aug-13	13:51	13.13	20	4	
08-Aug-13	13:51	13.13	2	1	
08-Aug-13	13:51	13.13	18	8	
08-Aug-13	13:51	13.13	2	1	
08-Aug-13	13:51	13.13	8	4	
08-Aug-13	13:51	13.13	20	8	
08-Aug-13	13:51	13.13	9	3	
08-Aug-13	13:51	13.13	2	1	
08-Aug-13	13:51	13.13	2	1	
08-Aug-13	13:51	13.13	8	4	
08-Aug-13	13:51	13.13	4	2	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

<b>Date</b>	<b>Time</b>	<b>Sitecode*</b>	<b>Count</b>	<b>Pups</b>	<b>Remarks</b>
08-Aug-13	13:51	13.13	16	7	
08-Aug-13	13:51	13.13	2	1	
08-Aug-13	13:51	13.13	2	1	
08-Aug-13	13:51	13.13	6	3	
08-Aug-13	13:51	13.13	16	7	
08-Aug-13	13:54	13.14	5	1	
08-Aug-13	13:54	13.14	5	2	
08-Aug-13	13:54	13.14	28	11	
08-Aug-13	13:54	13.14	3	0	
08-Aug-13	13:54	13.14	4	1	
08-Aug-13	13:54	13.14	3	2	
08-Aug-13	13:54	13.14	11	6	
08-Aug-13	13:54	13.14	7	3	
08-Aug-13	13:54	13.21	26	10	
08-Aug-13	13:57	13.21	16	7	
08-Aug-13	13:57	13.21	9	3	
08-Aug-13	13:57	13.21	8	2	
08-Aug-13	13:57	13.21	8	3	
08-Aug-13	13:57	13.21	10	3	
08-Aug-13	13:57	13.21	5	2	
08-Aug-13	13:59	13.20	17	7	
08-Aug-13	13:59	13.20	14	1	
08-Aug-13	14:01	13.18	6	3	
08-Aug-13	14:01	13.18	3	1	
08-Aug-13	14:01	13.18	17	4	
08-Aug-13	14:02	13.17	5	2	
08-Aug-13	14:02	13.17	5	2	
08-Aug-13	14:02	13.17	20	7	
08-Aug-13	14:02	13.17	99	39	
08-Aug-13	14:02	13.17	9	3	
08-Aug-13	14:02	13.17	5	2	
08-Aug-13	14:02	13.17	2	1	
08-Aug-13	14:02	13.17	4	1	
08-Aug-13	14:02	13.17	16	4	
08-Aug-13	14:02	13.17	23	7	
08-Aug-13	14:04	13.17	10	3	
08-Aug-13	14:04	13.17	8	3	
08-Aug-13	14:04	13.19	6	3	
08-Aug-13	14:04	13.19	6	3	
08-Aug-13	14:04	13.19	4	1	
08-Aug-13	14:04	13.19	4	1	
08-Aug-13	14:04	13.19	8	2	



*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

<b>Date</b>	<b>Time</b>	<b>Sitecode*</b>	<b>Count</b>	<b>Pups</b>	<b>Remarks</b>
08-Aug-13	14:04	13.19	4	1	
08-Aug-13	14:04	13.19	2	1	
08-Aug-13	14:04	13.19	5	2	
08-Aug-13	14:04	13.19	24	6	
08-Aug-13	14:08	13.15	12	3	
08-Aug-13	14:08	13.15	14	3	
08-Aug-13	14:08	13.15	11	3	
08-Aug-13	14:11	13.15	4	2	
08-Aug-13	14:11	13.15	4	2	
08-Aug-13	14:13	13.16	7	3	
08-Aug-13	14:17	13.34	0	0	
08-Aug-13	14:20	13.34	2	1	
08-Aug-13	14:20	13.34	5	2	
08-Aug-13	14:21	13.25	55	12	
08-Aug-13	14:22	13.24	7	2	
08-Aug-13	14:22	13.24	2	1	
08-Aug-13	14:22	13.24	3	1	
08-Aug-13	14:22	13.24	7	3	
08-Aug-13	14:22	13.24	2	1	
08-Aug-13	14:22	13.24	8	3	
08-Aug-13	14:22	13.24	12	4	
08-Aug-13	14:22	13.24	3	1	
08-Aug-13	14:22	13.24	8	3	
08-Aug-13	14:24	13.26	7	2	
08-Aug-13	14:24	13.26	2	1	
08-Aug-13	14:26	13.28	2	1	
08-Aug-13	14:26	13.28	2	1	
08-Aug-13	14:26	13.28	3	1	
08-Aug-13	14:26	13.28	5	2	
08-Aug-13	14:26	13.29	8	3	
08-Aug-13	14:31	12.36	2	1	
08-Aug-13	14:31	12.36	5	3	
08-Aug-13	14:31	12.36	4	2	
08-Aug-13	14:32	12.35	2	1	
08-Aug-13	14:34	12.48	4	1	
08-Aug-13	14:36	12.29	25	12	
08-Aug-13	14:37	12.30	5	1	
08-Aug-13	14:37	12.30	4	1	
08-Aug-13	14:37	12.30	4	1	
08-Aug-13	14:37	12.30	7	3	
08-Aug-13	14:37	12.50	2	1	
08-Aug-13	14:37	12.50	30	10	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

<b>Date</b>	<b>Time</b>	<b>Sitecode*</b>	<b>Count</b>	<b>Pups</b>	<b>Remarks</b>
08-Aug-13	14:39	12.27	4	2	
08-Aug-13	14:39	12.27	9	3	
08-Aug-13	14:39	12.34	37	7	
08-Aug-13	14:39	12.34	6	2	
08-Aug-13	14:39	12.34	10	3	
08-Aug-13	14:40	12.22	21	3	
08-Aug-13	14:40	12.22	4	2	
08-Aug-13	14:40	12.22	2	1	
08-Aug-13	14:40	12.26	6	2	
08-Aug-13	14:42	12.25	27	4	
08-Aug-13	14:42	12.25	2	1	
08-Aug-13	14:44	12.23	3	1	
08-Aug-13	14:44	12.23	3	2	
08-Aug-13	14:44	12.23	14	1	
08-Aug-13	14:44	12.23	8	2	
08-Aug-13	14:44	12.23	13	1	
08-Aug-13	14:44	12.23	3	1	
08-Aug-13	14:44	12.23	11	3	
08-Aug-13	14:47	12.23	37	7	
08-Aug-13	14:48	12.22	2	1	
08-Aug-13	14:48	12.22	3	1	
08-Aug-13	14:51	12.20	17	3	
08-Aug-13	14:52	12.18	3	2	
08-Aug-13	14:52	12.18	5	2	
08-Aug-13	14:54	12.15	12	3	
08-Aug-13	14:55	12.13	16	4	
08-Aug-13	14:55	12.13	2	1	
08-Aug-13	14:55	12.13	2	1	
08-Aug-13	14:55	12.13	6	2	
08-Aug-13	14:55	12.13	4	2	
08-Aug-13	14:57	12.14	58	14	
08-Aug-13	14:58	12.10	12	2	
08-Aug-13	14:58	12.10	14	1	
08-Aug-13	14:58	12.10	24	2	
08-Aug-13	15:00	12.09	24	0	
08-Aug-13	15:01	12.06	3	1	
08-Aug-13	15:01	12.06	7	1	
08-Aug-13	15:01	12.06	2	1	
08-Aug-13	15:04	12.01	16	3	
08-Aug-13	15:04	12.03	2	1	
08-Aug-13	15:04	12.03	5	2	
08-Aug-13	15:06	11.31	5	1	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

Date	Time	Sitecode*	Count	Pups	Remarks
08-Aug-13	15:07	11.32	12	2	
08-Aug-13	15:09	11.30	0	0	
08-Aug-13	15:10	11.28	2	0	
08-Aug-13	15:10	11.28	4	1	
08-Aug-13	15:11	11.29	15	4	
08-Aug-13	15:11	11.29	7	1	
08-Aug-13	15:11	11.29	13	3	
08-Aug-13	15:11	11.29	25	2	
<b>Total</b>			<b>5956</b>	<b>1666</b>	
26-Aug-13	9:42	8.03	22	6	
26-Aug-13	9:45	8.12	0	0	
26-Aug-13	9:53	8.04	13	3	
26-Aug-13	9:53	8.04	30	5	
26-Aug-13	9:53	8.04	32	5	
26-Aug-13	9:53	8.04	15	2	
26-Aug-13	9:59	8.05	32	6	
26-Aug-13	9:59	8.05	31	10	
26-Aug-13	9:59	8.05	14	1	
26-Aug-13	10:05	8.14	11		
26-Aug-13	10:10	8.15	4	2	
26-Aug-13	10:11	8.06	31	7	
26-Aug-13	10:25	8.08	17	6	
26-Aug-13	10:25	8.08	2	1	
26-Aug-13	10:25	8.08	35	11	
26-Aug-13	10:25	8.08	12	6	
26-Aug-13	10:28	8.08	6	3	
26-Aug-13	10:40	8.09	6	0	
26-Aug-13	10:47	10.03	17	8	
26-Aug-13	10:55	10.06	258	54	
26-Aug-13	10:59	10.07	0	0	
26-Aug-13	10:59	10.07	2	1	
26-Aug-13	11:10	10.18	16	1	
26-Aug-13	11:10	10.18	33	5	
26-Aug-13	11:10	10.18	28	2	
26-Aug-13	11:10	10.18	4	2	
26-Aug-13	11:10	10.18	5	0	
26-Aug-13	11:10	10.18	21	4	
26-Aug-13	11:10	10.18	3	0	
26-Aug-13	11:10	10.18	22	7	
26-Aug-13	11:35	10.02	30	0	
26-Aug-13	11:43	10.19	1	0	
26-Aug-13	12:01	9.37	124	5	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

Date	Time	Sitecode*	Count	Pups	Remarks
26-Aug-13	12:01	9.37	107	9	
26-Aug-13	12:01	9.37	114	9	
26-Aug-13	12:05	9.37	26	0	
26-Aug-13	12:25	7.09	119	30	
26-Aug-13	12:25	7.09	9	4	
26-Aug-13	12:25	7.09	64	20	
26-Aug-13	12:42	8.02	33	5	
26-Aug-13	12:48	10.01	24	3	
26-Aug-13	12:48	10.01	29	2	
26-Aug-13	12:59	10.00	16	0	new = Orchard Rocks
26-Aug-13	13:12	10.00	56	7	new = logbooms at Suldán's Marina in Sinclair Inlet
26-Aug-13	13:12	10.00	2	0	new = logbooms at Suldán's Marina in Sinclair Inlet
<b>Total</b>			<b>1476</b>	<b>252</b>	
27-Aug-13	10:00	10.01	15	1	
27-Aug-13	10:07	10.01	10	0	
27-Aug-13	10:07	10.01	18	0	
27-Aug-13	10:07	10.01	12	2	
27-Aug-13	10:07	10.01	4	0	
27-Aug-13	10:12	8.02	26	6	
27-Aug-13	10:12	8.02	3	0	
27-Aug-13	10:12	8.02	13	4	
27-Aug-13	10:22	7.09	55	13	
27-Aug-13	10:22	7.09	58	12	
27-Aug-13	10:22	7.09	9	0	
27-Aug-13	10:30	9.38	48	14	
27-Aug-13	10:30	9.38	91	19	
27-Aug-13	10:30	9.38	51	7	
27-Aug-13	10:40	9.31	73	3	
27-Aug-13	10:40	9.31	5	0	
27-Aug-13	10:40	9.31	3	0	
27-Aug-13	10:40	9.31	3	0	
27-Aug-13	10:53	9.34	4	0	
27-Aug-13	10:53	9.34	31	8	
27-Aug-13	10:53	9.34	2	1	
27-Aug-13	10:53	9.34	4	0	
27-Aug-13	11:05	9.36	61	6	
27-Aug-13	11:05	9.36	8	0	
27-Aug-13	11:05	9.36	2	0	
27-Aug-13	11:05	9.36	11	5	
27-Aug-13	11:08	9.36	6	0	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

Date	Time	Sitecode*	Count	Pups	Remarks
27-Aug-13	11:08	9.36	0	0	
27-Aug-13	11:15	9.37	109	7	
27-Aug-13	11:15	9.37	102	18	
27-Aug-13	11:15	9.37	133	29	
27-Aug-13	11:15	9.37	3	0	
27-Aug-13	11:26	9.37	25	3	
27-Aug-13	11:43	10.89	238	18	"Hercules" tug with tow; 2 mi NE Bainbridge Island 47°43'28"N 122°27'59"W
27-Aug-13	11:55	10.00	43	6	new = logbooms at Suldan's Marina in Sinclair Inlet
27-Aug-13	11:55	10.00	15	0	new = logbooms at Suldan's Marina in Sinclair Inlet
27-Aug-13	12:00	8.12	11	0	
27-Aug-13	12:09	8.03	15	0	
27-Aug-13	12:18	8.13	8	2	
27-Aug-13	12:19	8.03	101	20	
27-Aug-13	12:22	8.04	28	8	
27-Aug-13	12:22	8.04	20	9	
27-Aug-13	12:26	8.04	89	20	
27-Aug-13	12:26	8.04	29	4	
27-Aug-13	12:26	8.04	56	8	
27-Aug-13	12:28	8.05	1	0	
27-Aug-13	12:28	8.05	66	13	
27-Aug-13	12:28	8.05	32	8	
27-Aug-13	12:35	8.14	17	0	
27-Aug-13	12:38	8.06	41	5	
27-Aug-13	12:38	8.06	22	3	
27-Aug-13	12:38	8.06	18	3	
27-Aug-13	12:56	8.08	3	0	
27-Aug-13	12:56	8.08	12	0	
27-Aug-13	12:56	8.08	64	9	
27-Aug-13	12:56	8.08	40	12	
27-Aug-13	12:56	8.08	12	0	
27-Aug-13	13:05	8.09	9	0	
<b>Total</b>			<b>1988</b>	<b>306</b>	
06-Nov-13	10:24	8.09	12	0	
06-Nov-13	10:30	8.17	6	0	
06-Nov-13	10:36	8.08	259	0	
06-Nov-13	10:37	8.08	19	1	
06-Nov-13	10:40	8.18	11	0	
06-Nov-13	10:48	8.07	0	0	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

Date	Time	Sitecode*	Count	Pups	Remarks
06-Nov-13	10:49	8.06	61	0	
06-Nov-13	10:55	8.14	8	0	
06-Nov-13	10:55	8.14	4	0	
06-Nov-13	10:57	8.04	150	0	
06-Nov-13	10:57	8.05	6	0	
06-Nov-13	10:57	8.05	13	0	
06-Nov-13	10:57	8.05	2	0	
06-Nov-13	10:57	8.05	1	0	
06-Nov-13	10:57	8.05	1	0	
06-Nov-13	11:01	8.04	13	0	
06-Nov-13	11:03	8.04	46	0	
06-Nov-13	11:04	8.04	7	0	
06-Nov-13	11:04	8.04	7	0	
06-Nov-13	11:07	8.13	28	0	
06-Nov-13	11:09	8.03	2	0	
06-Nov-13	11:09	8.03	5	0	
06-Nov-13	11:09	8.03	2	0	
06-Nov-13	11:09	8.03	30	0	
06-Nov-13	11:09	8.03	2	0	
06-Nov-13	11:09	8.03	8	0	
06-Nov-13	11:09	8.03	1	0	
06-Nov-13	11:09	8.03	6	0	
06-Nov-13	11:09	8.03	8	0	
06-Nov-13	11:09	8.03	14	0	
06-Nov-13	11:12	8.03	101	0	
06-Nov-13	11:15	8.12	8	0	
06-Nov-13	11:25	8.02	82	0	
06-Nov-13	11:36	7.15	98	0	
06-Nov-13	11:37	10.35	0	0	
06-Nov-13	11:41	7.00	9	0	new = w. side of Indian Island below bluff
06-Nov-13	11:56	7.06	180	0	
06-Nov-13	11:57	7.05	134	0	
06-Nov-13	11:57	7.05	5	0	
06-Nov-13	12:08	7.07	117	0	
06-Nov-13	12:11	7.08	136	0	
06-Nov-13	12:11	7.08	90	0	
06-Nov-13	12:18	9.39	14	0	
06-Nov-13	12:18	9.39	9	0	
06-Nov-13	12:35	9.31	7	0	
06-Nov-13	12:35	9.31	16	0	
06-Nov-13	12:42	9.34	6	0	
06-Nov-13	12:42	9.34	5	0	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

Date	Time	Sitecode*	Count	Pups	Remarks
06-Nov-13	12:49	9.38	38	0	
06-Nov-13	12:49	9.38	2	0	
06-Nov-13	13:02	9.36	8	0	
06-Nov-13	13:03	9.37	9	0	
06-Nov-13	13:04	9.37	8	0	
06-Nov-13	13:04	9.37	18	0	
06-Nov-13	13:08	9.37	176	0	
06-Nov-13	13:08	9.37	188	0	
06-Nov-13	13:08	9.37	149	0	
06-Nov-13	13:31	10.19	3	0	
06-Nov-13	13:43	10.02	11	0	
06-Nov-13	13:43	10.02	3	0	
06-Nov-13	13:49	10.00	15	0	new = floats in Clam Bay at EPA Lab
06-Nov-13	13:49	10.00	20	0	new = Orchard Rocks
06-Nov-13	13:57	10.00	11	0	new = logbooms at Suldán's Marina in Sinclair Inlet
06-Nov-13	13:57	10.00	3	0	new = logbooms at Suldán's Marina in Sinclair Inlet
06-Nov-13	14:16	10.18	1	0	
06-Nov-13	14:16	10.18	2	0	
06-Nov-13	14:19	10.18	242	0	
06-Nov-13	14:19	10.18	3	0	
06-Nov-13	14:19	10.18	9	0	
06-Nov-13	14:19	10.18	1	0	
06-Nov-13	14:19	10.18	5	0	
06-Nov-13	14:19	10.18	1	0	
06-Nov-13	14:36	10.08	44	0	
06-Nov-13	14:41	10.07	43	0	
06-Nov-13	14:44	10.06	6	0	
06-Nov-13	14:44	10.06	30	0	
06-Nov-13	14:45	10.06	4	0	
06-Nov-13	14:48	10.03	0	0	
06-Nov-13	14:49	10.15	35	0	
06-Nov-13	14:51	10.15	12	0	
<b>Total</b>			<b>2849</b>	<b>1</b>	
07-Nov-13					Survey cancelled due to weather
08-Nov-13	10:09	10.06	24	0	
08-Nov-13	10:15	10.03	176	0	
08-Nov-13	10:26	10.00	18	0	new = floats in Clam Bay at EPA Lab
08-Nov-13	10:41	10.00	15	0	new = logbooms at Suldán's Marina in Sinclair Inlet
08-Nov-13	10:48	8.17	6	0	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

Date	Time	Sitecode*	Count	Pups	Remarks
08-Nov-13	11:01	8.08	7	0	
08-Nov-13	11:02	8.08	271	0	
08-Nov-13	11:02	8.08	52	0	
08-Nov-13	11:14	8.06	3	0	
08-Nov-13	11:14	8.06	74	0	
08-Nov-13	11:21	8.14	9	0	
08-Nov-13	11:21	8.14	4	0	
08-Nov-13	11:21	8.14	2	0	
08-Nov-13	11:25	8.05	3	0	
08-Nov-13	11:25	8.05	10	0	
08-Nov-13	11:30	8.04	12	0	
08-Nov-13	11:30	8.04	36	0	
08-Nov-13	11:30	8.04	133	0	
08-Nov-13	11:30	8.04	5	0	
08-Nov-13	11:39	8.03	14	0	
08-Nov-13	11:39	8.03	21	0	
08-Nov-13	11:39	8.03	35	0	
08-Nov-13	11:39	8.03	116	0	
08-Nov-13	11:43	8.12	4	0	
08-Nov-13	11:44	8.12	0	0	
08-Nov-13	12:03	7.15	56	0	
08-Nov-13	12:07	7.00	10	0	new = w. side of Indian Island below bluff
08-Nov-13	12:11	7.09	1	0	
08-Nov-13	12:20	7.06	46	0	
08-Nov-13	12:20	7.06	107	0	
08-Nov-13	12:22	7.05	13	0	
08-Nov-13	12:22	7.05	194	0	
08-Nov-13	12:32	7.07	195	0	
08-Nov-13	12:34	7.08	5	0	
08-Nov-13	12:34	7.08	207	0	
08-Nov-13	12:34	7.08	104	0	
08-Nov-13	12:45	9.39	26	0	
08-Nov-13	12:45	9.39	15	0	
08-Nov-13	13:00	9.34	1	0	
08-Nov-13	13:00	9.34	1	0	
08-Nov-13	13:10	9.38	110	0	
08-Nov-13	13:23	9.37	2	0	
08-Nov-13	13:23	9.37	4	0	
08-Nov-13	13:25	9.37	3	0	
08-Nov-13	13:25	9.37	4	0	
08-Nov-13	13:25	9.37	641	0	
08-Nov-13	14:03	10.02	2	0	



*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

Date	Time	Sitecode*	Count	Pups	Remarks
08-Nov-13	14:03	10.02	4	0	
08-Nov-13	14:23	10.18	13	0	
08-Nov-13	14:24	10.18	285	0	
08-Nov-13	14:24	10.18	1	0	
<b>Total</b>			<b>3100</b>	<b>0</b>	
03-Feb-14	12:35	10.03	0	0	
03-Feb-14	12:43	10.06	82	0	
03-Feb-14	12:51	10.07	5	0	
03-Feb-14	13:12	10.18	6	0	
03-Feb-14	13:59	10.39	14	0	
03-Feb-14	14:29	9.37	25	0	
03-Feb-14	14:42	9.38	91	0	
03-Feb-14	15:02	9.30	4	0	
03-Feb-14	15:05	9.39	20	0	
03-Feb-14	15:11	7.08	166	0	
03-Feb-14	15:15	7.07	16	0	
03-Feb-14	15:28	7.05	262	0	
03-Feb-14	15:50	7.15	5	0	
03-Feb-14	15:50	7.16	29	0	
<b>Total</b>			<b>725</b>	<b>0</b>	
04-Feb-14	12:40	10.08	0	0	
04-Feb-14	12:43	10.07	0	0	
04-Feb-14	12:43	10.07	0	0	
04-Feb-14	12:48	10.12	0	0	
04-Feb-14	12:53	10.40	0	0	
04-Feb-14	12:57	10.14	6	0	
04-Feb-14	12:58	10.14	4	0	
04-Feb-14	12:59	10.14	0	0	
04-Feb-14	13:15	8.17	0	0	
04-Feb-14	13:16	8.08	0	0	
04-Feb-14	13:19	8.18	0	0	
04-Feb-14	13:23	8.15	0	0	
04-Feb-14	13:26	8.06	0	0	
04-Feb-14	13:29	8.14	0	0	
04-Feb-14	13:29	8.14	0	0	
04-Feb-14	13:33	8.05	0	0	
04-Feb-14	13:35	8.04	0	0	
04-Feb-14	13:36	8.16	0	0	
04-Feb-14	13:38	8.13	0	0	
04-Feb-14	13:41	8.03	0	0	
04-Feb-14	13:41	8.03	13	0	
04-Feb-14	13:44	8.12	0	0	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

Date	Time	Sitecode*	Count	Pups	Remarks
04-Feb-14	13:45	8.11	0	0	
04-Feb-14	13:50	8.00	0	0	new = Sister Rock at Hood Canal Bridge
04-Feb-14	13:53	8.02	0	0	
04-Feb-14	13:56	7.16	0	0	
04-Feb-14	13:57	7.15	2	0	
04-Feb-14	13:58	7.15	59	0	
04-Feb-14	14:00	7.15	1	0	
04-Feb-14	14:05	7.10	0	0	
04-Feb-14	14:08	7.00	0	0	new = w. side of Indian Island below bluff
04-Feb-14	14:15	7.06	0	0	
04-Feb-14	14:18	7.05	393	0	
04-Feb-14	14:23	7.03	0	0	
04-Feb-14	14:26	7.02	0	0	
04-Feb-14	14:34	7.07	14	0	
04-Feb-14	14:34	7.07	28	0	
04-Feb-14	14:36	7.08	336	0	
04-Feb-14	14:40	9.39	1	0	
04-Feb-14	14:44	9.39	5	0	
04-Feb-14	14:46	9.39	0	0	
04-Feb-14	14:53	9.31	0	0	
04-Feb-14	14:55	9.32	0	0	
04-Feb-14	14:58	9.34	0	0	
04-Feb-14	15:00	9.34	0	0	
04-Feb-14	15:05	9.38	0	0	
04-Feb-14	15:14	9.36	0	0	
04-Feb-14	15:16	9.37	1	0	
04-Feb-14	15:17	9.37	198	0	
04-Feb-14	15:53	10.02	0	0	
04-Feb-14	15:55	10.00	0	0	new = floats in Clam Bay at EPA Lab
04-Feb-14	15:57	10.00	19	0	new = Orchard Rocks
04-Feb-14	16:05	10.01	0	0	
04-Feb-14	16:06	10.01	0	0	
04-Feb-14	16:16	10.00	4	0	new = logbooms at Suldan's Marina in Sinclair Inlet
04-Feb-14	16:34	10.18	1	0	
04-Feb-14	16:34	10.18	35	0	
04-Feb-14	16:46	10.07	0	0	
04-Feb-14	16:48	10.06	5	0	
04-Feb-14	16:52	10.03	0	0	
04-Feb-14	16:53	10.04	0	0	
<b>Total</b>			<b>1125</b>	<b>0</b>	
05-Feb-14	12:40	10.06	0	0	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

Date	Time	Sitecode*	Count	Pups	Remarks
05-Feb-14	12:42	10.07	0	0	
05-Feb-14	12:54	10.09	0	0	
05-Feb-14	12:54	10.09	0	0	
05-Feb-14	12:59	10.12	1	0	
05-Feb-14	13:04	10.40	0	0	
05-Feb-14	13:08	10.14	0	0	
05-Feb-14	13:10	10.14	4	0	
05-Feb-14	13:11	10.14	0	0	
05-Feb-14	13:25	8.17	0	0	
05-Feb-14	13:29	8.08	0	0	
05-Feb-14	13:31	8.18	0	0	
05-Feb-14	13:34	8.15	0	0	
05-Feb-14	13:37	8.06	0	0	
05-Feb-14	13:37	8.07	0	0	
05-Feb-14	13:41	8.14	0	0	
05-Feb-14	13:42	8.14	8	0	
05-Feb-14	13:43	8.14	0	0	
05-Feb-14	13:45	8.05	0	0	
05-Feb-14	13:46	8.04	0	0	
05-Feb-14	13:49	8.16	0	0	
05-Feb-14	13:51	8.13	0	0	
05-Feb-14	13:53	8.03	1	0	
05-Feb-14	13:53	8.03	1	0	
05-Feb-14	13:53	8.03	40	0	
05-Feb-14	13:56	8.12	0	0	
05-Feb-14	13:58	8.13	0	0	
05-Feb-14	14:02	8.00	0	0	new = Sister Rock at Hood Canal Bridge
05-Feb-14	14:04	8.02	1	0	
05-Feb-14	14:08	7.15	2	0	
05-Feb-14	14:08	7.15	1	0	
05-Feb-14	14:08	7.15	8	0	
05-Feb-14	14:09	7.15	28	0	
05-Feb-14	14:09	7.15	2	0	
05-Feb-14	14:10	7.15	1	0	
05-Feb-14	14:14	7.10	0	0	
05-Feb-14	14:16	7.00	0	0	new = w. side of Indian Island below bluff
05-Feb-14	14:18	7.10	0	0	
05-Feb-14	14:24	7.05	22	0	
05-Feb-14	14:24	7.06	0	0	
05-Feb-14	14:30	7.03	0	0	
05-Feb-14	14:32	7.02	0	0	
05-Feb-14	14:32	7.07	25	0	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

Date	Time	Sitecode*	Count	Pups	Remarks
05-Feb-14	14:39	7.07	2	0	
05-Feb-14	14:42	7.08	20	0	
05-Feb-14	14:49	9.39	0	0	
05-Feb-14	14:49	9.39	0	0	
05-Feb-14	14:52	9.39	0	0	
05-Feb-14	14:59	9.31	0	0	
05-Feb-14	15:01	9.32	0	0	
05-Feb-14	15:04	9.34	0	0	
05-Feb-14	15:07	9.34	0	0	
05-Feb-14	15:11	9.38	12	0	
05-Feb-14	15:11	9.38	4	0	
05-Feb-14	15:11	9.38	12	0	
05-Feb-14	15:22	9.36	0	0	
05-Feb-14	15:23	9.37	1	0	
05-Feb-14	15:24	9.37	1	0	
05-Feb-14	15:24	9.37	150	0	
05-Feb-14	16:04	10.02	0	0	
05-Feb-14	16:07	10.00	41	0	new = Orchard Rocks
05-Feb-14	16:07	10.00	2	0	new = Orchard Rocks
05-Feb-14	16:13	10.01	0	0	
05-Feb-14	16:13	10.01	0	0	
05-Feb-14	16:44	10.18	4	0	
05-Feb-14	16:44	10.18	21	0	
<b>Total</b>			<b>415</b>	<b>0</b>	
17-Feb-14	12:07	10.06	71	0	
17-Feb-14	12:20	10.09	1	0	
17-Feb-14	12:26	10.12	7	0	
17-Feb-14	12:35	10.14	2	0	
17-Feb-14	12:58	8.04	1	0	
17-Feb-14	13:15	8.02	12	0	
17-Feb-14	13:19	7.15	3	0	
17-Feb-14	13:20	7.15	9	0	
17-Feb-14	13:21	7.15	1	0	
17-Feb-14	13:32	10.89	17	0	Tug "Swinomish" with logboom 47 52' 48.8" N 122 22'2.4" W
17-Feb-14	13:40	9.37	60	0	
17-Feb-14	14:12	10.02	3	0	
17-Feb-14	14:16	10.00	6	0	new = Orchard Rocks
17-Feb-14	14:34	10.00	13	0	new = logbooms at Suldan's Marina in Sinclair Inlet
<b>Total</b>			<b>206</b>	<b>0</b>	
18-Feb-13					Survey cancelled due to weather

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

<b>Date</b>	<b>Time</b>	<b>Sitecode*</b>	<b>Count</b>	<b>Pups</b>	<b>Remarks</b>
19-Feb-14	10:47	10.06	117	0	
19-Feb-14	10:58	10.07	67	0	
19-Feb-14	11:10	10.09	54	0	
19-Feb-14	11:12	10.09	15	0	
19-Feb-14	11:18	10.12	24	0	
19-Feb-14	11:18	10.12	20	0	
19-Feb-14	11:27	10.14	4	0	
19-Feb-14	11:29	10.14	3	0	
19-Feb-14	11:56	8.06	11	0	
19-Feb-14	12:10	8.03	69	0	
19-Feb-14	12:10	8.03	3	0	
19-Feb-14	12:18	7.15	5	0	
19-Feb-14	12:23	7.15	10	0	
19-Feb-14	12:23	7.15	38	0	
19-Feb-14	12:25	7.15	2	0	
19-Feb-14	12:25	7.15	1	0	
19-Feb-14	12:40	7.09	5	0	
19-Feb-14	12:47	7.05	457	0	
19-Feb-14	13:04	7.08	451	0	
19-Feb-14	13:12	9.39	10	0	
19-Feb-14	13:32	9.38	139	0	
19-Feb-14	13:44	9.37	200	0	
19-Feb-14	14:17	10.02	18	0	
19-Feb-14	14:22	10.00	60	0	new = Orchard Rocks
19-Feb-14	14:28	10.00	16	0	new = logbooms at Suldan's Marina in Sinclair Inlet
19-Feb-14	14:47	10.18	137	0	
<b>Total</b>			<b>1936</b>	<b>0</b>	

\*Site codes are from Jeffries et al. (2000). Note: Haulout areas designated by Site Code "xx.00" are new sites not listed in Jeffries et al. (2000).

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## APPENDIX C: STELLER SEA LIONS (*EUMETOPIAS JUBATUS*) RECORDED DURING AERIAL SURVEYS CONDUCTED 11 MARCH 2013 TO 19 FEBRUARY 2014

Date	Time	Sitecode*	Count	Remarks
11-Mar-13	10:43	7.00	0	new = Indian Island Port Security Barrier
11-Mar-13	10:44	7.10	8	Craven Rock
11-Mar-13	11:18	9.37	0	new = Everett Port Security Barrier
11-Mar-13	11:47	10.39	2	
11-Mar-13	11:48	10.00	0	new = floats in Clam Bay at EPA Lab
11-Mar-13	11:53	10.00	3	new = Bremerton Port Security Barrier
11-Mar-13	12:16	10.25	1	
11-Mar-13	12:19	10.24	2	
<b>Total</b>			<b>16</b>	
13-Mar-13	10:07	12.10	8	
13-Mar-13	12:17	9.37	0	new = Everett Port Security Barrier
13-Mar-13	12:35	10.02	1	
13-Mar-13	12:37	10.39	2	
13-Mar-13	12:42	10.00	0	new = Bremerton Port Security Barrier
<b>Total</b>			<b>11</b>	
21-Mar-13	13:12	7.10	8	Craven Rock
21-Mar-13	13:15	7.00	0	new = Indian Island Port Security Barrier
21-Mar-13	14:18	9.37	0	new = Everett Port Security Barrier
21-Mar-13	14:23	10.31	3	
21-Mar-13	14:47	10.02	1	
21-Mar-13	14:47	10.38	1	
21-Mar-13	14:49	10.39	2	
21-Mar-13	14:54	10.00	3	new = Bremerton Port Security Barrier
<b>Total</b>			<b>18</b>	
22-Mar-13	14:19	7.10	8	Craven Rock
22-Mar-13	14:23	7.00	0	new = Indian Island Port Security Barrier
22-Mar-13	15:27	9.37	1	new = Everett Port Security Barrier
22-Mar-13	16:00	10.00	5	new = mooring buoys in Elliott Bay off Harbor Island
22-Mar-13	16:01	10.00	2	new = floats in Clam Bay at EPA Lab
22-Mar-13	16:04	10.38	3	
22-Mar-13	16:06	10.39	0	
22-Mar-13	16:12	10.00	2	new = Bremerton Port Security Barrier
22-Mar-13	16:30	10.25	1	
22-Mar-13	16:35	10.23	1	
<b>Total</b>			<b>23</b>	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

Date	Time	Sitecode*	Count	Remarks
08-Apr-13	12:04	7.00	0	new = Indian Island Port Security Barrier
08-Apr-13	13:26	9.37	0	new = Everett Port Security Barrier
08-Apr-13	13:32	10.31	3	
08-Apr-13	13:36	10.33	2	
08-Apr-13	13:46	7.10	14	Craven Rock
08-Apr-13	14:13	10.00	4	new = mooring buoys in Elliott Bay off Harbor Island
08-Apr-13	14:17	10.38	2	
08-Apr-13	14:20	10.39	3	
08-Apr-13	14:34	10.00	1	new = Bremerton Port Security Barrier
<b>Total</b>			<b>29</b>	
09-Apr-13	12:13	7.00	0	new = Indian Island Port Security Barrier
09-Apr-13	12:17	7.10	14	Craven Rock Steller with brand "281R"
09-Apr-13	13:44	9.37	1	new = Everett Port Security Barrier
09-Apr-13	14:31	10.00	0	new = Bremerton Port Security Barrier
<b>Total</b>			<b>15</b>	
23-Jul-13	13:30	9.37	0	new = Everett Port Security Barrier
23-Jul-13	14:04	7.00	0	new = Indian Island Port Security Barrier
<b>Total</b>			<b>0</b>	
24-Jul-13	16:36	10.00	0	new = Bremerton Port Security Barrier
<b>Total</b>			<b>0</b>	
25-Jul-13	13:26	5.22	476	
25-Jul-13	13:26	5.22	44	
25-Jul-13	13:26	5.22	23	
25-Jul-13	13:26	5.22	26	
25-Jul-13	13:28	5.22	5	
25-Jul-13	13:28	5.22	113	
25-Jul-13	13:32	6.01	0	
<b>Total</b>			<b>687</b>	
26-Jul-13	10:39	5.22	618	
26-Jul-13	10:39	5.22	100	
26-Jul-13	10:40	5.22	4	
<b>Total</b>			<b>722</b>	
06-Aug-13	10:42	9.37	0	new = Everett Port Security Barrier
06-Aug-13	11:20	10.00	0	new = Bremerton Port Security Barrier
06-Aug-13	14:14	7.00	0	new = Indian Island Port Security Barrier
<b>Total</b>			<b>0</b>	
07-Aug-13	11:49	7.00	0	new = Indian Island Port Security Barrier
07-Aug-13	14:30	12.10	1	
<b>Total</b>			<b>1</b>	
08-Aug-13	13:57	13.17	1	



*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

Date	Time	Sitecode*	Count	Remarks
08-Aug-13	14:58	12.10	2	
<b>Total</b>			<b>3</b>	
26-Aug-13	12:05	9.37	0	new = Everett Port Security Barrier
26-Aug-13	12:23	7.00	0	new = Indian Island Port Security Barrier
26-Aug-13	13:03	10.00	1	new = Bremerton Port Security Barrier
<b>Total</b>			<b>1</b>	
27-Aug-13	10:20	7.00	0	new = Indian Island Port Security Barrier
27-Aug-13	11:15	9.37	0	new = Everett Port Security Barrier
27-Aug-13	11:43	10.00	0	new = Bremerton Port Security Barrier
<b>Total</b>			<b>0</b>	
06-Nov-13	11:45	7.00	0	new = Indian Island Port Security Barrier
06-Nov-13	11:46	7.10	12	Craven Rock
06-Nov-13	13:06	9.37	0	new = Everett Port Security Barrier
06-Nov-13	13:38	10.00	1	new = mooring buoys in Elliott Bay off Harbor Island
06-Nov-13	13:43	10.02	1	
06-Nov-13	13:49	10.00	18	new = floats in Clam Bay at EPA Lab
06-Nov-13	13:49	10.00	3	new = floats in Clam Bay at EPA Lab
06-Nov-13	13:56	10.00	0	new = Bremerton Port Security Barrier
06-Nov-13	14:07	10.25	1	
06-Nov-13	14:34	10.00	3	new = s. Kentron Island/Solo Pt mooring buoy
06-Nov-13	14:38	10.22	5	
<b>Total</b>			<b>44</b>	
08-Nov-13	9:59	10.22	1	
08-Nov-13	10:26	10.00	32	new = floats in Clam Bay at EPA Lab
08-Nov-13	10:31	10.00	0	new = Bremerton Port Security Barrier
08-Nov-13	12:03	7.15	1	
08-Nov-13	12:10	7.00	0	new = Indian Island Port Security Barrier
08-Nov-13	12:11	7.10	8	Craven Rock
08-Nov-13	12:20	7.06	1	
08-Nov-13	13:27	9.37	0	new = Everett Port Security Barrier
08-Nov-13	13:52	10.28	1	
08-Nov-13	14:03	10.38	2	
08-Nov-13	14:08	10.99	3	
08-Nov-13	14:21	10.23	1	
<b>Total</b>			<b>50</b>	
03-Feb-14	13:38	10.39	1	
03-Feb-14	13:39	10.00	0	new = floats in Clam Bay at EPA Lab
03-Feb-14	13:45	10.00	0	new = Bremerton Port Security Barrier
03-Feb-14	14:30	9.37	0	new = Everett Port Security Barrier
03-Feb-14	15:41	7.00	0	new = Indian Island Port Security Barrier

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

Date	Time	Sitecode*	Count	Remarks
<b>Total</b>			<b>1</b>	
04-Feb-14	14:09	7.00	0	new = Indian Island Port Security Barrier
04-Feb-14	15:18	9.37	0	new = Everett Port Security Barrier
04-Feb-14	15:29	10.33	1	
04-Feb-14	15:48	10.00	1	new = mooring buoys in Elliott Bay off Harbor Island
04-Feb-14	15:55	10.00	0	new = floats in Clam Bay at EPA Lab
04-Feb-14	16:12	10.00	0	new = Bremerton Port Security Barrier
<b>Total</b>			<b>2</b>	
05-Feb-14	14:18	7.00	0	new = Indian Island Port Security Barrier
05-Feb-14	15:27	9.37	0	new = Everett Port Security Barrier
05-Feb-14	15:34	10.31	2	
05-Feb-14	15:36	10.33	1	
05-Feb-13	16:07	10.00	0	new = floats in Clam Bay at EPA Lab
05-Feb-14	16:22	10.00	0	new = Bremerton Port Security Barrier
<b>Total</b>			<b>3</b>	
17-Feb-14	12:05	10.22	2	
17-Feb-14	13:45	9.37	0	new = Everett Port Security Barrier
17-Feb-14	14:07	10.00	3	new = mooring buoys in Elliott Bay off Harbor Island
17-Feb-14	14:16	10.00	0	new = floats in Clam Bay at EPA Lab
17-Feb-14	14:33	10.00	0	new = Bremerton Port Security Barrier
<b>Total</b>			<b>5</b>	
19-Feb-14	12:35	7.10	16	Craven Rock
19-Feb-14	12:39	7.00	0	new = Indian Island Port Security Barrier
19-Feb-14	13:47	9.37	0	new = Everett Port Security Barrier
19-Feb-14	14:20	10.00	0	new = floats in Clam Bay at EPA Lab
19-Feb-14	14:26	10.00	0	new = Bremerton Port Security Barrier
<b>Total</b>			<b>16</b>	

\*Site codes are from Jeffries et al 2000. Note: Haulout areas designated by Site Code "xx.00" are new sites not listed in Jeffries et al 2000.

**APPENDIX D: CALIFORNIA SEA LIONS (*ZALOPHUS CALIFORNIANUS*) RECORDED DURING AERIAL SURVEYS CONDUCTED 11 MARCH 2013 TO 19 FEBRUARY 2014**

<b>Date</b>	<b>Time</b>	<b>Sitecode*</b>	<b>Total</b>	<b>Remarks</b>
11-Mar-13	10:42	7.00	0	new = red buoy "2" off Pt. Hudson (Port Townsend)
11-Mar-13	10:43	7.00	0	new = Indian Island Port Security Barrier
11-Mar-13	10:48	10.37	0	
11-Mar-13	11:16	9.37	1	
11-Mar-13	11:18	9.37	80	new = Everett Port Security Barrier
11-Mar-13	11:32	10.30	1	
11-Mar-13	11:36	10.19	1	
11-Mar-13	11:36	10.28	1	
11-Mar-13	11:42	10.00	25	new = mooring buoys in Elliott Bay off Harbor Island
11-Mar-13	11:43	10.26	1	
11-Mar-13	11:48	10.39	1	
11-Mar-13	11:48	10.00	0	new = floats in Clam Bay at EPA Lab
11-Mar-13	11:53	10.00	12	new = Bremerton Port Security Barrier
11-Mar-13	12:19	10.24	1	
11-Mar-13	12:24	10.18	6	
<b>Total</b>			<b>130</b>	
13-Mar-13	12:17	9.37	15	new = Everett Port Security Barrier
13-Mar-13	12:32	10.27	1	
13-Mar-13	12:38	10.00	0	new = floats in Clam Bay at EPA Lab
13-Mar-13	12:42	10.00	6	new = Bremerton Port Security Barrier
<b>Total</b>			<b>22</b>	
21-Mar-13	13:15	7.00	0	new = Indian Island Port Security Barrier
21-Mar-13	14:18	9.37	85	new = Everett Port Security Barrier
21-Mar-13	14:19	9.40	1	
21-Mar-13	14:25	10.31	1	
21-Mar-13	14:26	10.33	2	
21-Mar-13	14:38	10.19	4	
21-Mar-13	14:39	10.27	3	
21-Mar-13	14:43	10.00	35	new = mooring buoys in Elliott Bay off Harbor Island
21-Mar-13	14:47	10.38	1	
21-Mar-13	14:50	10.00	3	new = floats in Clam Bay at EPA Lab
21-Mar-13	14:54	10.00	16	new = Bremerton Port Security Barrier
<b>Total</b>			<b>151</b>	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

Date	Time	Sitecode*	Total	Remarks
22-Mar-13	14:23	7.00	0	new = Indian Island Port Security Barrier
22-Mar-13	15:27	9.37	91	new = Everett Port Security Barrier
22-Mar-13	16:00	10.00	15	new = mooring buoys in Elliott Bay off Harbor Island
22-Mar-13	16:07	10.00	5	new = floats in Clam Bay at EPA Lab
22-Mar-13	16:12	10.00	26	new = Bremerton Port Security Barrier
22-Mar-13	16:30	10.25	1	
22-Mar-13	16:32	10.24	1	
22-Mar-13	16:39	10.18	1	
<b>Total</b>			<b>140</b>	
08-Apr-13	12:04	7.00	0	new = Indian Island Port Security Barrier
08-Apr-13	13:24	9.37	2	
08-Apr-13	13:26	9.37	94	new = Everett Port Security Barrier
08-Apr-13	13:37	10.34	1	
08-Apr-13	14:03	10.19	5	
08-Apr-13	14:12	10.00	14	new = mooring buoys in Elliott Bay off Harbor Island
08-Apr-13	14:13	10.00	16	new = mooring buoys in Elliott Bay off Harbor Island
08-Apr-13	14:17	10.38	1	
08-Apr-13	14:19	10.00	0	new = floats in Clam Bay at EPA Lab
08-Apr-13	14:20	10.39	3	
08-Apr-13	14:21	10.39	1	
08-Apr-13	14:34	10.00	33	new = Bremerton Port Security Barrier
08-Apr-13	15:19	10.18	7	
<b>Total</b>			<b>177</b>	
09-Apr-13	12:03	10.34	1	
09-Apr-13	12:13	7.00	0	new = Indian Island Port Security Barrier
09-Apr-13	13:44	9.37	96	new = Everett Port Security Barrier
09-Apr-13	13:46	9.40	0	
09-Apr-13	13:59	10.30	1	
09-Apr-13	14:03	10.19	6	
09-Apr-13	14:03	10.19	1	
09-Apr-13	14:05	10.27	1	
09-Apr-13	14:11	10.00	12	new = mooring buoys in Elliott Bay off Harbor Island
09-Apr-13	14:11	10.00	20	new = mooring buoys in Elliott Bay off Harbor Island
09-Apr-13	14:16	10.38	1	
09-Apr-13	14:18	10.00	0	new = floats in Clam Bay at EPA Lab
09-Apr-13	14:31	10.00	34	new = Bremerton Port Security Barrier
09-Apr-13	15:10	10.25	2	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

Date	Time	Sitecode*	Total	Remarks
09-Apr-13	15:20	10.18	7	
<b>Total</b>			<b>182</b>	
23-Jul-13	13:34	9.37	3	new = Everett Port Security Barrier
23-Jul-13	14:04	7.00	0	new = Indian Island Port Security Barrier
<b>Total</b>			<b>3</b>	
24-Jul-13	14:07	10.00	0	new = floats in Clam Bay at EPA Lab
24-Jul-13	16:36	10.00	0	new = Bremerton Port Security Barrier
<b>Total</b>			<b>0</b>	
06-Aug-13	10:42	9.37	7	new = Everett Port Security Barrier
06-Aug-13	10:55	10.30	1	
06-Aug-13	11:06	10.26	2	
06-Aug-13	11:07	10.38	2	
06-Aug-13	11:12	10.00	0	new = floats in Clam Bay at EPA Lab
06-Aug-13	11:20	10.00	2	new = Bremerton Port Security Barrier
06-Aug-13	13:52	10.37	1	
06-Aug-13	14:14	7.00	0	new = Indian Island Port Security Barrier
<b>Total</b>			<b>15</b>	
07-Aug-13	11:49	7.00	0	new = Indian Island Port Security Barrier
<b>Total</b>			<b>0</b>	
26-Aug-13	11:30	10.26	1	
26-Aug-13	11:33	10.38	2	
26-Aug-13	11:40	10.00	4	new = mooring buoys in Elliott Bay off Harbor Island
26-Aug-13	11:40	10.00	5	new = mooring buoys in Elliott Bay off Harbor Island
26-Aug-13	11:57	10.31	1	
26-Aug-13	12:00	9.40	1	
26-Aug-13	12:00	10.32	1	
26-Aug-13	12:05	9.37	0	new = Everett Port Security Barrier
26-Aug-13	12:12	9.30	1	
26-Aug-13	12:23	7.00	0	new = Indian Island Port Security Barrier
26-Aug-13	12:59	10.39	1	
26-Aug-13	13:01	10.00	0	new = floats in Clam Bay at EPA Lab
26-Aug-13	13:03	10.00	20	new = Bremerton Port Security Barrier
<b>Total</b>			<b>37</b>	
27-Aug-13	10:20	7.00	0	new = Indian Island Port Security Barrier
27-Aug-13	11:26	9.37	50	new = Everett Port Security Barrier
27-Aug-13	11:43	10.00	45	new = Bremerton Port Security Barrier
27-Aug-13	11:48	10.00	0	new = floats in Clam Bay at EPA Lab
<b>Total</b>			<b>95</b>	
06-Nov-13	11:45	7.00	0	new = Indian Island Port Security Barrier
06-Nov-13	13:06	9.37	117	new = Everett Port Security Barrier

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

<b>Date</b>	<b>Time</b>	<b>Sitecode*</b>	<b>Total</b>	<b>Remarks</b>
06-Nov-13	13:07	9.40	2	
06-Nov-13	13:12	9.40	2	
06-Nov-13	13:20	10.99	2	
06-Nov-13	13:20	10.99	1	
06-Nov-13	13:27	10.30	1	
06-Nov-13	13:31	10.27	1	
06-Nov-13	13:34	10.28	2	
06-Nov-13	13:38	10.00	4	new = mooring buoys in Elliott Bay off Harbor Island
06-Nov-13	13:38	10.00	9	new = mooring buoys in Elliott Bay off Harbor Island
06-Nov-13	13:38	10.00	8	new = mooring buoys in Elliott Bay off Harbor Island
06-Nov-13	13:40	10.26	3	
06-Nov-13	13:42	10.38	1	
06-Nov-13	13:49	10.00	6	new = floats in Clam Bay at EPA Lab
06-Nov-13	13:49	10.00	8	new = floats in Clam Bay at EPA Lab
06-Nov-13	13:56	10.00	169	new = Bremerton Port Security Barrier
06-Nov-13	14:07	10.25	1	
06-Nov-13	14:11	10.24	2	
06-Nov-13	14:16	10.18	4	
06-Nov-13	14:16	10.18	1	
06-Nov-13	14:37	10.08	1	
<b>Total</b>			<b>345</b>	
08-Nov-13	9:59	10.22	1	
08-Nov-13	10:06	10.08	1	
08-Nov-13	10:26	10.00	53	new = floats in Clam Bay at EPA Lab
08-Nov-13	10:27	10.39	1	
08-Nov-13	10:31	10.00	164	new = Bremerton Port Security Barrier
08-Nov-13	12:10	7.00	0	new = Indian Island Port Security Barrier
08-Nov-13	13:27	9.37	131	new = Everett Port Security Barrier
08-Nov-13	13:29	9.40	2	
08-Nov-13	13:46	10.30	1	
08-Nov-13	13:50	10.19	2	
08-Nov-13	13:58	10.00	15	new = mooring buoys in Elliott Bay off Harbor Island
08-Nov-13	13:58	10.00	6	new = mooring buoys in Elliott Bay off Harbor Island
08-Nov-13	13:58	10.00	28	new = mooring buoys in Elliott Bay off Harbor Island
08-Nov-13	14:01	10.26	2	
08-Nov-13	14:13	10.24	1	
08-Nov-13	14:13	10.25	2	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

<b>Date</b>	<b>Time</b>	<b>Sitecode*</b>	<b>Total</b>	<b>Remarks</b>
08-Nov-13	14:22	10.18	2	
<b>Total</b>			<b>412</b>	
03-Feb-14	13:39	10.00	0	new = floats in Clam Bay at EPA Lab
03-Feb-14	13:43	10.00	28	new = Bremerton Port Security Barrier
03-Feb-14	14:23	10.32	1	
03-Feb-14	14:30	9.37	39	new = Everett Port Security Barrier
03-Feb-13	15:41	7.00	0	new = Indian Island Port Security Barrier
<b>Total</b>			<b>68</b>	
04-Feb-14	12:35	10.00	1	
04-Feb-14	12:40	10.08	1	
04-Feb-14	14:09	7.00	0	new = Indian Island Port Security Barrier
04-Feb-14	15:17	9.40	2	
04-Feb-14	15:18	9.37	50	new = Everett Port Security Barrier
04-Feb-14	15:24	10.32	2	
04-Feb-14	15:44	10.19	2	
04-Feb-14	15:48	10.00	1	new = mooring buoys in Elliott Bay off Harbor Island
04-Feb-14	15:48	10.00	12	new = mooring buoys in Elliott Bay off Harbor Island
04-Feb-14	15:52	10.38	2	
04-Feb-14	15:54	10.39	0	
05-Feb-14	15:55	10.00	0	new = floats in Clam Bay at EPA Lab
04-Feb-14	15:56	10.39	1	
04-Feb-14	16:12	10.00	28	new = Bremerton Port Security Barrier
<b>Total</b>			<b>102</b>	
05-Feb-14	14:18	7.00	0	new = Indian Island Port Security Barrier
05-Feb-14	15:25	9.37	40	new = Everett Port Security Barrier
05-Feb-14	15:34	10.31	1	
05-Feb-14	15:50	10.30	1	
05-Feb-14	15:54	10.19	5	
05-Feb-14	15:54	10.19	1	
05-Feb-14	15:56	10.28	2	
05-Feb-14	16:01	10.00	6	new = mooring buoys in Elliott Bay off Harbor Island
05-Feb-14	16:02	10.26	1	
05-Feb-14	16:03	10.38	2	
05-Feb-14	16:05	10.39	1	
05-Feb-14	16:07	10.00	1	new = floats in Clam Bay at EPA Lab
05-Feb-14	16:24	10.00	28	new = Bremerton Port Security Barrier
<b>Total</b>			<b>89</b>	
17-Feb-14	13:23	10.36	1	
17-Feb-14	13:27	10.31	2	

*Aerial Surveys of Pinniped Haulout Sites in Pacific Northwest Inland Waters*

Date	Time	Sitecode*	Total	Remarks
17-Feb-14	13:27	10.31	1	
17-Feb-14	13:45	9.37	92	new = Everett Port Security Barrier
17-Feb-14	13:46	9.40	1	
17-Feb-14	13:57	10.30	1	
17-Feb-14	14:01	10.19	6	
17-Feb-14	14:07	10.00	18	new = mooring buoys in Elliott Bay off Harbor Island
17-Feb-14	14:07	10.00	7	new = mooring buoys in Elliott Bay off Harbor Island
17-Feb-14	14:16	10.00	0	new = floats in Clam Bay at EPA Lab
17-Feb-14	14:33	10.00	17	new = Bremerton Port Security Barrier
17-Feb-14	14:44	10.25	1	
17-Feb-14	14:46	10.24	1	
<b>Total</b>			<b>148</b>	
19-Feb-14	12:29	10.34	1	
19-Feb-14	13:47	9.37	100	new = Everett Port Security Barrier
19-Feb-14	13:48	9.40	2	
19-Feb-14	13:53	10.31	3	
19-Feb-14	13:56	10.33	1	
19-Feb-14	14:02	10.30	1	
19-Feb-14	14:05	10.19	2	
19-Feb-14	14:13	10.00	18	new = mooring buoys in Elliott Bay off Harbor Island
19-Feb-14	14:14	10.00	18	new = mooring buoys in Elliott Bay off Harbor Island
19-Feb-14	14:17	10.38	1	
19-Feb-14	14:20	10.39	1	
19-Feb-14	14:20	10.00	0	new = floats in Clam Bay at EPA Lab
19-Feb-14	14:26	10.00	44	new = Bremerton Port Security Barrier
19-Feb-14	14:37	10.25	1	
19-Feb-14	14:39	10.24	1	
<b>Total</b>			<b>194</b>	

\*Site codes are from Jeffries et al 2000. Note: Haulout areas designated by Site Code "xx.00" are new sites not listed in Jeffries et al. (2000).



**APPENDIX E: MARINE MAMMALS OTHER THAN HARBOR SEALS, STELLER SEA LIONS, AND CALIFORNIA SEA LIONS RECORDED DURING AERIAL SURVEYS CONDUCTED 11 MARCH 2013 TO 19 FEBRUARY 2014**

Date	Time	Sitecode*	Count	Remarks
<b>Northern elephant seal, <i>Mirounga angustirostris</i></b>				
08-Apr-13	12:12	7.05	3	Juveniles with harbor seals on Kanem Spit
09-Apr-13	12:27	7.05	2	Juveniles with harbor seals on Kanem Spit
23-Jul-13	14:16	7.06	1	Juvenile with harbor seals on Violet Spit
23-Jul-13	14:24	7.05	2	Juveniles with harbor seals on Kanem Spit
24-Jul-13	10:40	7.05	2	Juveniles with harbor seals on Kanem Spit
25-Jul-13	14:22	7.06	1	Juvenile with harbor seals on Violet Spit
25-Jul-13	14:30	7.05	2	Juveniles with harbor seals on Kanem Spit
26-Jul-13	13:22	7.06	2	Juveniles with harbor seals on Violet Spit
06-Nov-13	11:57	7.05	1	Juvenile with harbor seals on Kanem Spit
08-Nov-13	12:22	7.05	2	Juveniles with harbor seals on Kanem Spit
<b>Gray whale, <i>Eschrichtius robustus</i></b>				
908-Apr-13	13:28	---	1	W. side of Gedney Island 48°0' 8.1" N 122°19' 27.9" W
09-Apr-13	13:47	---	1	S. side of Gedney Island 47°59'43.7" N 122°18' 33.8" W
26-Jul-13	10:29	---	1	N. of Hoko Rock 48°17' 23.1" N 124°22' 16.5 W
26-Jul-13	10:43	---	1	Near Mushroom Rock 48°23' 18.8" N 124°42' 38.1" W
26-Jul-13	10:52	---	1	1/2 mile E. of Bowman Beach 48°20' 53.7" N 124°31' 2.7" W
26-Jul-13	10:54	---	1	Shipwreck Point 48°19' 1.9" N 124°26' 30.8" W
26-Jul-13	10:57	---	1	Off Eagle Point 48°17' 16.8" N 124°21' 23.0"
<b>Killer whale, <i>Orcinus orca</i></b>				
08-Aug-13	15:25	---	5	Off False Bay, San Juan Island 48°27' 56.8" N 123°5' 14.0" W

\*Site codes are from Jeffries et al. (2000). Note: Haulout areas designated by Site Code "xx.00" are new sites not listed in Jeffries et al. (2000).

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