



of

Seal and Sea Lion Haulout Sites in Washington



Washington
Department of
**FISH and
WILDLIFE**

Washington Department of
FISH AND WILDLIFE
Wildlife Science Division

February 2000

Atlas of Seal and Sea Lion Haulout Sites in Washington

Steven J. Jeffries, Patrick J. Gearin, Harriet R. Huber,
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February 2000



California sea lion with Steller sea lion males on rock east of Tatoosh Island. Cover photo: Patrick Gearin

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A special thanks for the skills and talents of the many pilots who have flown the many aerial surveys of Washington's marine waters looking for seals and sea lions including Val Judkins, Dave Rheaume, Jim Hodgson and Gary Thomas of the Washington Department of Fish and Wildlife's Aviation Division. Shelley Snyder and John Talmadge of the Washington Department of Fish and Wildlife's Geographic Information System provided expert assistance and advice for mapping locations and designing the atlas layout.

All photographs by Steven Jeffries unless otherwise indicated.

About the Atlas and Maps

The purpose of this atlas is to provide information on haulout sites for harbor seals, Steller sea lions, California sea lions, and northern elephant seals located in Washington waters. Locations are provided in order to conduct assessment surveys as well as identify important sites used by these species relative to potential sources of disturbance, development, and other uses of Washington's marine environment.

This atlas divides the various marine waters of Washington into survey regions which are based on the timing of harbor seal pupping seasons in different marine areas of Washington. Locations of haulout sites were mapped for sites which have been identified during aerial, ground and boat surveys conducted by personnel from the Washington Department of Fish and Wildlife, National Marine Fisheries Service and Cascadia Research Collective as part of ongoing assessment efforts for these pinniped species in Northwest waters.

Maps were produced in encapsulated postscript format using Arc/Info, revision 7.0.4 GIS software developed by Environmental Systems Research Institute (ESRI). The maps are projected in Washington State Plane South Zone, Datum NAD27. The latitudes and longitudes listed in the tables and appendices are likewise in Datum NAD27.

Haulout sites were digitized using the ESRI GIS software from USGS 7.5 minute quadrangles with several exceptions. In British Columbia, the Vancouver Island, Gulf Islands, and Race Rocks sites were digitized from NOAA Chart 18400 at a scale of 1:200,000. The sites located around the mouth of the Fraser River, Roberts Bank, Boundary Bay and Mud Bay were digitized from 1:50,000 scale Canadian quadrangle maps. Buoy sites in Puget Sound were digitized from NOAA Chart 18440 at a scale of 1:150,000.

The digital base maps came from a wide variety of sources. The Washington State shorelines were produced by the Washington Department of Natural Resources (DNR) at 1:24,000. The British Columbia shoreline at a scale of 1:2,000,000 was produced by the BC Ministry of Environment, Lands and Parks. The Oregon coast shoreline at a scale of 1:100,000 was supplied by the Oregon State GIS Service Center.

Mudflats and sandbars were derived largely from the National Wetlands Inventory (NWI) database. Some areas were updated using USGS 7.5 quadrangle maps and 1:50,000 Canadian quadrangle maps. Columbia River mudflats and sandbars were enhanced using data derived from the Washington River Information System (WARIS) developed by the Washington Department of Fish and Wildlife and Bonneville Power Administration.

U.S. Fish and Wildlife Service site codes were used as necessary to identify rocks and islands in the Washington Islands and San Juan Islands National Wildlife Refuges.

Explanation of Map Codes

Site Code: Code used within Washington State Department of Fish and Wildlife and National Marine Fisheries Service databases only.

Use code: Indicates the tidal state when a species is most likely to be hauled out at a site. “Low” means use of the site is primarily during low tide (i.e. intertidal shoals and reefs). “High” means use of the site is primarily during high tides (i.e. at channels near river mouths). “All” means use of the site is independent of tidal levels (i.e. log booms, buoys or floats).

Species Accounts

Harbor Seal (*Phoca vitulina richardsi*) Species Code: Pv

L: 75 to 180 cm; Wt: 9 to 120 kg; short coarse hair at birth; color ranging from pale or whitish w/black spots to nearly black overall, w/scattered whitish rings; flippers haired w/strong claws; two mammae.

This small, stocky seal is found throughout the temperate and arctic waters of the northern hemisphere, and has the widest distribution of any pinniped. It is considered a non-migratory species, breeding and feeding in the same area throughout the year. In water, harbor seals use their hind flippers for propulsion, but on land they hitch along using only its fore flippers.

The harbor seal is the most common, widely distributed pinniped found in Washington waters, and is frequently sighted by recreational boaters, ferry passengers and other users of the marine environment. Harbor seals use hundreds of sites to rest or haulout along the coast and inland waters, including intertidal sand bars and mudflats in estuaries, intertidal rocks and reefs, sandy, cobble, and rocky beaches, islands, logbooms, docks, and floats in all marine areas of the state. Group sizes typically range from small numbers of animals on some intertidal rocks to several thousand animals found seasonally in coastal estuaries. Males and females are similar in size (to 250 lbs) and coloration. Pelage patterns are typically a light colored base pelage with dark spots, although some individuals have a pelage which is reversed in coloration (dark colored base with light spots).

The harbor seal is the only pinniped species which is found year-round and breeds in Washington waters. Pupping seasons vary by geographic region, with pups born in coastal estuaries (Columbia River, Willapa Bay and Gray Harbor) from mid-April through June; Olympic Peninsula coast from May through July; San Juan Islands and eastern bays of Puget Sound from June through August; southern Puget Sound from mid-July through September; and Hood Canal from August through January. Females produce one pup per year, beginning at age four or five. Pups are precocious at birth, capable of swimming and following their mothers into the water immediately after birth. Pups typically remain with their mothers until weaning at 4-6 weeks of age. Pups call for their mothers until weaned with a sheep-like “m-a-a-a”; adults utter a variety of sounds including grunts, growls and barks.



Harbor seal female with nursing pup at Gertrude Island.

California Sea Lion (*Zalophus californianus*) Species Code: Zc

L: 76 to 245 cm; Wt: 6 to 450 kg; short dense hair; chocolate brown in color; naked flippers about 1/6 of overall length; four mammae; barks.

The California sea lion is the most frequently sighted otariid found in Washington waters and uses haulout sites along the outer coast, Strait of Juan de Fuca, and in Puget Sound. Haulout sites are located on jetties, offshore rocks and islands, logbooms, marina docks, and navigation buoys. This species also may be frequently seen resting in the water (rafted) together in groups in Puget Sound.

Only male California sea lions migrate into northwest waters, with females remaining in waters near their breeding rookeries off the coast of California and Mexico. This species was considered rare in Washington waters prior to the 1950's. Today peak numbers of 3,000-5,000 animals move into northwest waters (Washington and British Columbia) during the fall and remain until the late spring when most return to breeding rookeries in California and Mexico. Peak counts of over 1,000 animals have been made in Puget Sound in recent years. All age classes of males are present in Washington water, with animals ranging in size from 200 to 1000 lbs. Coloration of males is usually a dark or chocolate brown. The high forehead or sagittal crest with bleached out fur on top of the head is distinctive in adult males. Vocalizations can be described as barking.



California sea lion male on navigation buoy off Shilshole Bay in Puget Sound. Photo: Patrick Gearin

Steller Sea Lion (*Eumetopias jubatus*) Species Code: Ej

L: 105 to 320 cm; Wt: 18 to 1,100 kg; short, coarse hair; tawny to brownish; flippers very large, blackish, naked w/small nails; hind flippers about 1/5 of overall length; four mammae; growls.

The Steller (or Northern) sea lion is the largest of the eared or otariid seals found in Washington waters and uses haulout sites primarily along the outer coast from the Columbia River to Cape Flattery, as well as along the Vancouver Island side of the Strait of Juan de Fuca. Although breeding rookeries are located along the Oregon and British Columbia coasts, no breeding rookeries are found in Washington. Over its range, Steller sea lion population numbers have declined significantly over the last 15 years and the species is currently listed as either “Threatened” or “Endangered” under the Endangered Species Act.

In Washington, Steller sea lion numbers vary seasonally with peak counts of 1,000 animals present during the fall and winter months. Haulout sites are found on jetties, offshore rocks and coastal islands. This species may also be found occasionally on navigation buoys in Puget Sound as well. Both sexes are found in Washington waters, with males considerably larger (to 2,200 lbs) than females (to 700 lbs). Coloration varies from tawny through yellowish brown to dark brown. Vocalizations from adults can be described as a deep growling sound.



Steller sea lion male with California sea lions at tip of South Jetty, Columbia River.

Northern Elephant Seal (*Mirounga angustirostris*) Species Code: Ma

L: 120 to 600 cm; Wt: 35 to 3,600 kg; adult males possess a large, inflatable proboscis; hair short, sparse, grayish to brownish; flippers haired w/small claws; fore flippers slender, pointed; middle toes of hind flippers much shorter than outer; two mammae.

Northern elephant seals are the largest pinniped found in Northwest waters. A large adult male may weigh in excess of 2,000 lbs and is readily identified by a large inflatable proboscis. Females are considerably smaller in size (up to 1,000 lbs) and lack the inflatable proboscis. Breeding rookeries are located on beaches and islands in California and Mexico. Following both their winter breeding season and annual molt cycles, individuals disperse northward along the Oregon and Washington coasts. Males travel to feeding grounds in the Gulf of Alaska south of the Aleution Islands; females feed in deep off-shore waters between 35° and 45° N.

Solitary individuals occasionally seen in Washington inland waters. A few individuals use beaches at Destruction, Protection and Smith/Minor Islands as well as Dungeness Spit as haulout sites. In recent years, pups have been occasionally recorded at these sites as well. The northern elephant seal population has increased substantially in recent years and numbers in excess of 100,000 animals.



Northern elephant seal male resting on beach at San Miguel Island, California.



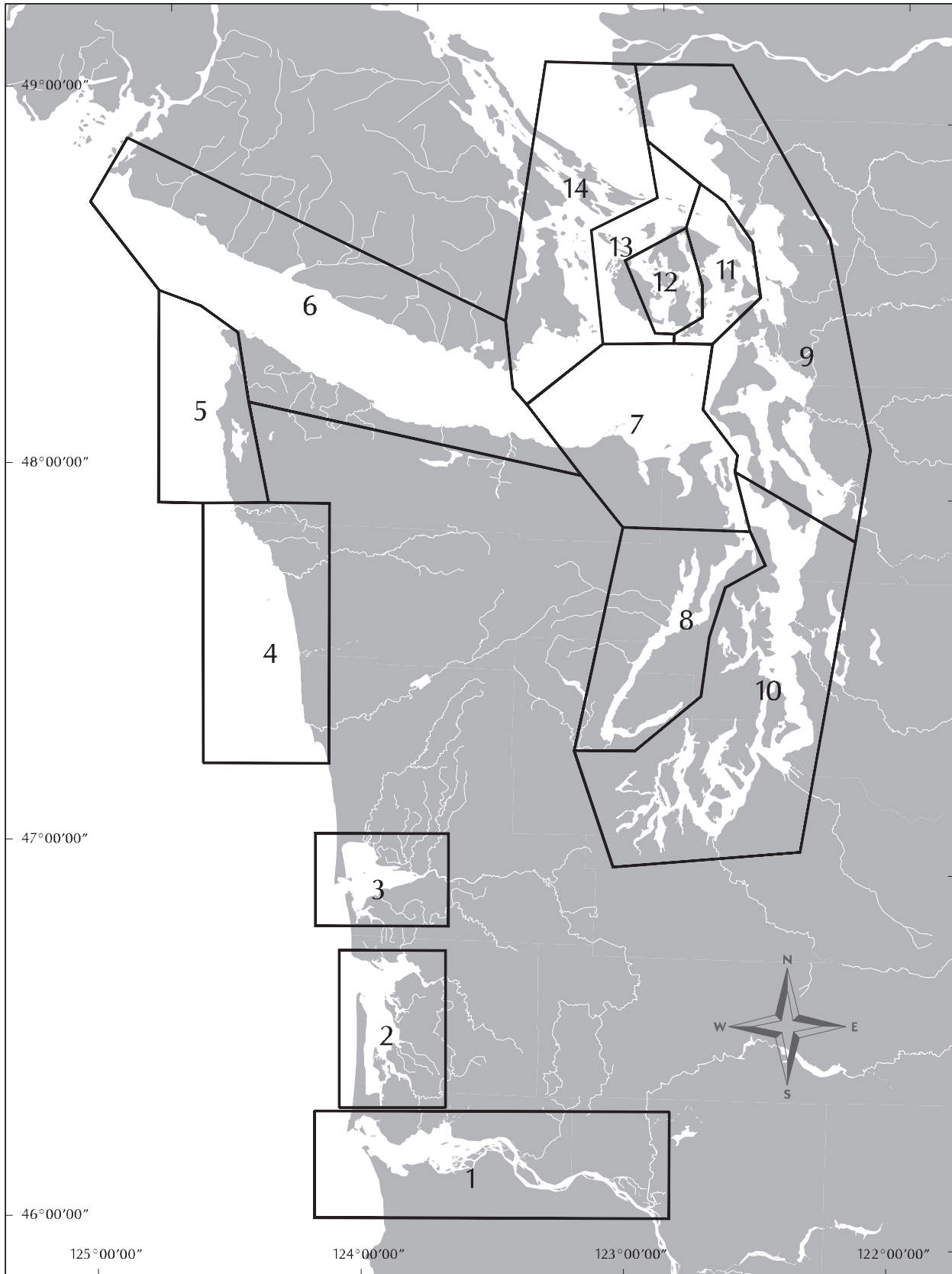
Northern elephant seal females resting on beach at San Miguel Island, California.

Pinniped Haulout Regions

This haulout site atlas divides the marine areas of Washington state and adjacent waters into 14 survey regions as follows:

- Region 1** Columbia River (Pacific Ocean to Cowlitz River)
- Region 2** Willapa Bay
- Region 3** Grays Harbor
- Region 4** Olympic Coast-South (Quillayute River to Point Grenville)
- Region 5** Olympic Peninsula-North (Cape Flattery to Quillayute River)
- Region 6** Strait of Juan de Fuca-West (Cape Beale to Port Angeles)
- Region 7** Strait of Juan de Fuca-East (Port Angeles to Whidbey Island)
- Region 8** Hood Canal
- Region 9** Eastern Bays (Boundary Bay to Port Gardner)
- Region 10** Puget Sound (Whidbey Island to Olympia)
- Region 11** San Juan Islands (Rosario Strait)
- Region 12** San Juan Islands (San Juan Channel)
- Region 13** San Juan Islands (Haro Strait)
- Region 14** British Columbia (Fraser River to Race Rocks)

Pinniped Haulout Regions Washington State and Adjacent Waters





Southwest Washington
Seal and Sea Lion
Haulout Sites

Region 1: Columbia River

Use NOAA Charts 18521 (Pacific Ocean to Harrington Point); 18523 (Harrington Point to Crims Island); and 18524 (Crims Island to Vancouver) for navigation and bathymetry details.

Large numbers of both Steller and California sea lions can be found seasonally at the tip of the South Jetty. California sea lions regularly are found upriver during the winter and spring using navigation buoys, jetty at the East Mooring Basin in Astoria, and at times on log booms in Carroll Slough near the mouth of the Cowlitz River. Small numbers of California sea lions are also frequently found upriver as far as Bonneville Dam and Willamette Falls.

Numerous harbor seal haulout sites are found on intertidal mudflats and sand bars in the lower Columbia River. Nursery areas are present in Cathlamet Bay. Peak harbor seal abundances in the Columbia River occur during the winter and spring when a number of upriver haulout sites are used. Peak abundances and upriver movements in the winter and spring months are correlated with spawning runs of eulachon smelt and out migration of salmonid smolts. The harbor seal pupping season in the Columbia River occurs from mid-April through June.

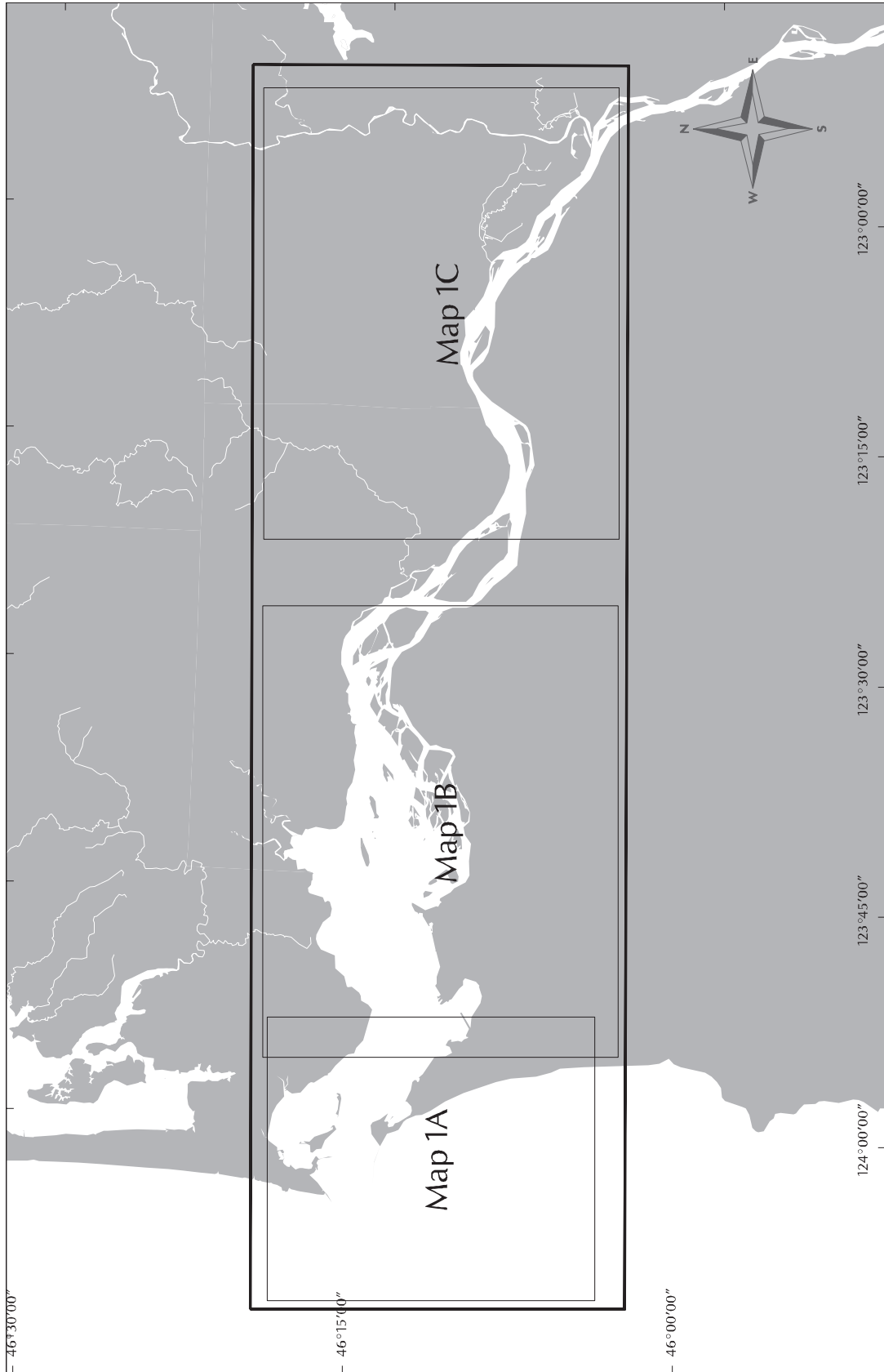


Steller sea lions hauled out on tip of South Jetty, Columbia River, June 4, 1996.



Columbia River

Region 1: Mouth to Cowlitz River



Region 1: Columbia River

<u>ID</u>	<u>Location</u>	<u>Survey Code</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Species</u>	<u>Count</u>	<u>Use</u>
1	Large Navigation Bouy	01.01	46 12.17	124 11.00	ZC,EJ	100-500	ALL
2	Tip of South Jetty	01.02	46 14.03	124 03.94	EJ,ZC,PV	100-500	ALL
3	Chinook/Baker Bay	01.03	46 15.90	123 57.89	PV	<100	LOW
4	Chinook/Baker Bay	01.03	46 15.74	123 57.63	PV	<100	LOW
5	Desdemona Sands	01.04	46 12.80	123 55.90	PV	100-500	LOW
6	Desdemona Sands	01.04	46 13.19	123 53.61	PV	<100	LOW
7	Desdemona Sands	01.04	46 12.73	123 53.33	PV	500>	LOW
8	Taylor Sands	01.05	46 14.20	123 48.40	PV	500>	LOW
9	Grays Bay	01.06	46 16.14	123 42.42	PV	<100	LOW
10	Grays Bay	01.06	46 16.71	124 43.54	PV	<100	LOW
11	Grays Bay	01.06	46 16.50	123 43.54	PV	<100	LOW
12	Cathlamet Bay	01.07	46 12.31	123 39.56	PV	100-500	LOW
13	Cathlamet Bay	01.07	46 12.99	123 41.74	PV	<100	LOW
14	Cathlamet Bay	01.07	46 12.86	123 40.50	PV	<100	LOW
15	Lower Woody/Snag Island	01.08	46 13.40	123 37.55	PV	<100	LOW
16	Lower Woody/Snag Island	01.08	46 13.95	123 37.10	PV	<100	LOW
17	Lower Woody/Snag Island	01.08	46 13.92	123 36.59	PV	<100	LOW
18	South of Miller Sands	01.09	46 13.87	123 38.84	PV	<100	LOW
19	Three Tree Point Area	01.10	46 15.77	123 30.85	PV	100-500	LOW
20	Three Tree Point Area	01.10	46 15.28	123 30.79	PV	100-500	LOW
21	NE of Welch Island	01.11	46 14.99	123 27.03	PV	<100	LOW
22	Wallace Island/Eureka Bar	01.12	46 08.74	123 16.04	PV	<100	LOW
23	Wallace Island/Eureka Bar	01.12	46 08.91	123 15.26	PV	<100	LOW
24	Cowlitz River/Carroll Slough	01.13	46 05.98	122 54.34	PV,ZC	100-500	LOW
25	Cowlitz River/Carroll Slough	01.13	46 05.53	122 53.66	ZC	<100	LOW
26	Tongue Point Sands	01.14	46 13.88	123 45.86	PV	500>	LOW
27	Tongue Point Sands	01.14	46 14.08	123 45.16	PV	<100	LOW
28	E Puget Island	01.15	46 08.95	123 18.76	PV	100-500	LOW
29	Astoria/E Mooring Basin	01.16	46 11.80	123 47.95	ZC	100-500	ALL



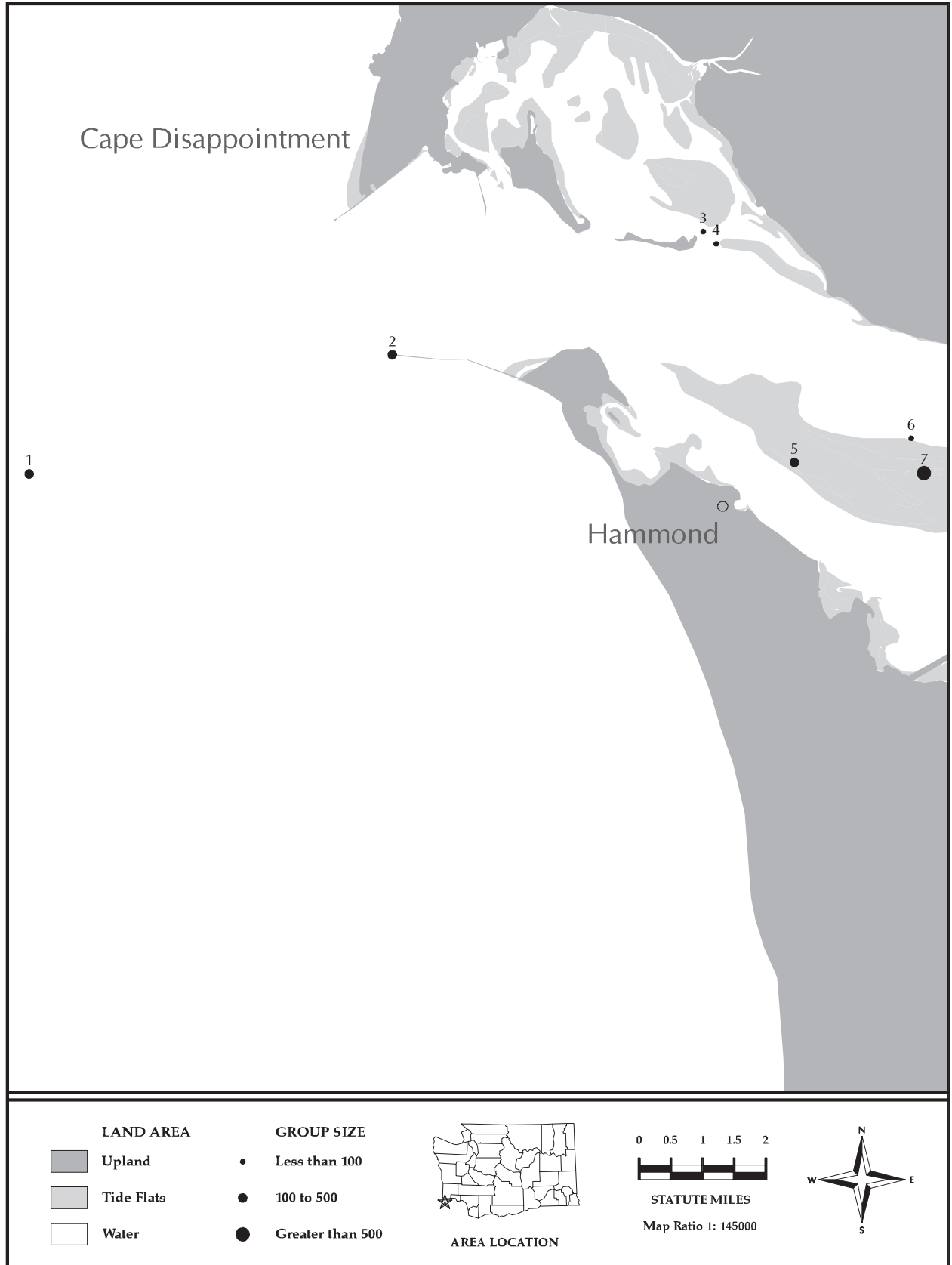
Region 1: Columbia River

ID	Description
1	Offshore navigation bouy (LNB) removed in early 1990's.
2	Year round on concrete slabs and rock rubble. Abandoned during high ocean swell.
3	Chinook Channel area. Intermittent use at low tides.
4	On shoals northwest of entrance channel. Intermittent use at low tides.
5	Shoal to the west of Astoria/Megler bridge. Alternate site used intermittently.
6	Shoals west of Astoria/Megler bridge. Alternate site used intermittently on extreme low tides.
7	Shoals west of Astoria/Megler bridge. Main lower river haulout.
8	Shoals north of Taylor Sands channel. Used extensively in 1980's.
9	Intermittent use of shoal area.
10	Year round on intertidal sand bars.
11	Year round on intertidal sand bars.
12	Exposed channels along Sanborn Slough.
13	Along shoals west of Green Island. Intermittent during pupping season.
14	Exposed channels north of Green Island during pupping season. Nursery area.
15	Shoals southwest of Snag Island.
16	Along northeast side of Snag Island (near line of pilings).
17	Shoals in lower Woody Island channel.
18	Along shoals on south side during winter and early spring.
19	On shoal just downriver from line of range markers during winter and spring.
20	Along north side of Grassy Island during winter and spring.
21	On shoal along northeast side of island during winter and spring.
22	Along edge of unnamed island south of Waterford during spring and winter.
23	Shoals south of Cooper Point along lower Eureka Channel during spring and winter.
24	Shoals near confluence with Columbia River during winter and spring.
25	Log booms anchored along Carroll Channel used intermittently during winter and spring.
26	Along northwest side of shoal during winter and spring.
27	Shoals upriver from main shoal area.
28	Upriver end of Puget Island during winter and spring.
29	On marina floats and upriver jetty near processing plant from late fall through spring.



Columbia River

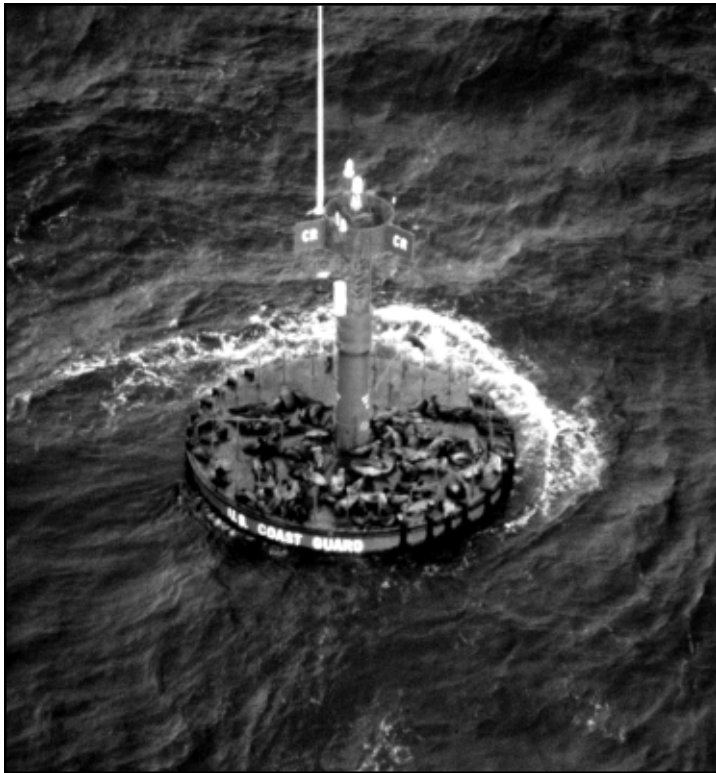
Map 1A: Large Navigation Bouy to Desdemona Sands



Columbia River

Map 1A: Large Navigation Bouy to Desdemona Sands

<u>ID</u>	<u>Location</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Species</u>	<u>Description</u>
1	Large Navigation Bouy	4612.17	12411.00	ZC,EJ	Offshore navigation bouy (LNB) removed in early 1990's.
2	Tip of South Jetty	4614.03	12403.94	EJ,ZC,PV	Year round on concrete slabs and rock rubble. Abandoned during high ocean swell.
3	Chinook/Baker Bay	4615.90	12357.89	PV	Chinook Channel area. Intermittent use at low tides.
4	Chinook/Baker Bay	4615.74	12357.63	PV	On shoals northwest of entrance channel. Intermittent use at low tides.
5	Desdemona Sands	4612.80	12355.90	PV	Shoal to the west of Astoria/Meglerbridge. Alternate site used intermittently.
6	Desdemona Sands	4613.19	12353.61	PV	Shoals west of Astoria/Megler bridge. Alternate site used intermittently on extreme low tides.
7	Desdemona Sands	4612.73	12353.33	PV	Shoals west of Astoria/Megler bridge. Main lower river haulout.



Steller sea lions hauled out on Large Navigation Bouy (LNB), Columbia River, December 16, 1991.

Columbia River

Map 1B: Desdemona Sands to Tenasillahe Island



Columbia River

Map 1B: Desdemona Sands to Tenasillahe Island

ID	Location	Latitude	Longitude	Species	Description
6	Desdemona Sands	4613.19	12353.61	PV	Shoals west of Astoria/Megler bridge. Alternate site used intermittently on extreme low tides.
7	Desdemona Sands	4612.73	12353.33	PV	Shoals west of Astoria/Megler bridge. Main lower river haulout.
8	Taylor Sands	4614.20	12348.40	PV	Shoals north of Taylor Sands channel. Used extensively in 1980's.
9	Grays Bay	4616.14	12342.42	PV	Intermittent use of shoal area.
10	Grays Bay	4616.71	12343.54	PV	Year round on intertidal sand bars.
11	Grays Bay	4616.50	12343.54	PV	Year round on intertidal sand bars.
12	Cathlamet Bay	4612.31	12339.56	PV	Exposed channels along Sanborn Slough.
13	Cathlamet Bay	4612.99	12341.74	PV	Along shoals west of Green Island. Intermittent during pupping season.
14	Cathlamet Bay	4612.86	12340.50	PV	Exposed channels north of Green Island during pupping season. Nursery area.
15	Lower Woody/Snag Island	4613.40	12337.55	PV	Shoals southwest of Snag Island.
16	Lower Woody/Snag Island	4613.95	12337.10	PV	Along northeast side of Snag Island (near line of pilings).
17	Lower Woody/Snag Island	4613.92	12336.59	PV	Shoals in lower Woody Island channel.
18	South of Miller Sands	4613.87	12338.84	PV	Along shoals on south side during winter and early spring.
19	Three Tree Point Area	4615.77	12330.85	PV	On shoal just downriver from line of range markers during winter and spring.
20	Three Tree Point Area	4615.28	12330.79	PV	Along north side of Grassy Island during winter and spring.
21	NE of Welch Island	4614.99	12327.03	PV	On shoal along northeast side of island during winter and spring.
26	Tongue Point Sands	4613.88	12345.86	PV	Along northwest side of shoal during winter and spring.
27	Tongue Point Sands	4614.08	12345.16	PV	Shoals upriver from main shoal area.
29	Astoria/E Mooring Basin	4611.80	12347.95	ZC	On marina floats and upriver jetty near processing plant from late fall through spring.



Harbor seals hauled out on intertidal shoal in Grays Bay, Columbia River, May 7, 1996.



Columbia River

Map 1C: Puget Island to Cowlitz River Mouth



Columbia River

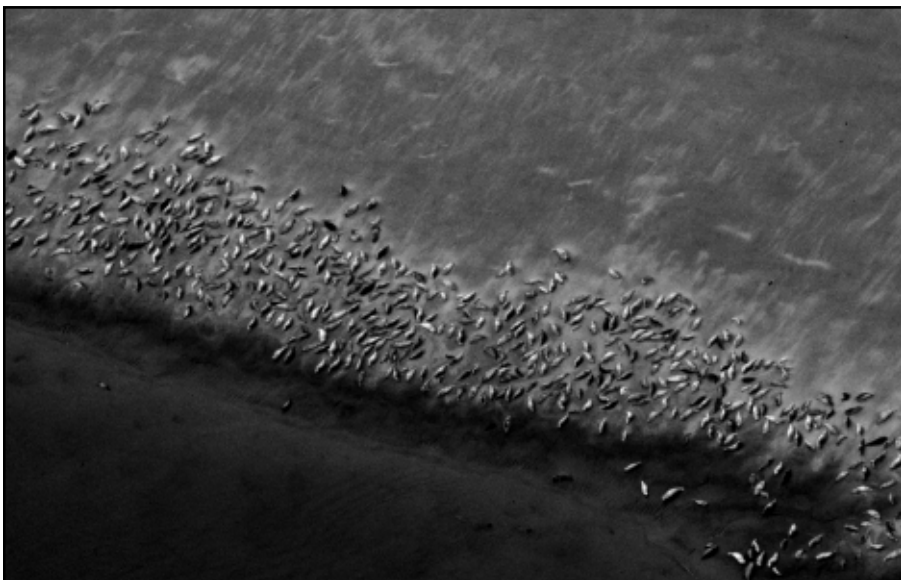
Map 1C: Puget Island to Cowlitz River Mouth

ID	Location	Latitude	Longitude	Species	Description
22	Wallace Island/Eureka Bar	4608.74	123 16.04	PV	Along edge of unnamed island south of Waterford during spring and winter.
23	Wallace Island/Eureka Bar	4608.91	123 15.26	PV	Shoals south of Cooper Point along lower Eureka Channel during spring and winter.
24	Cowlitz R/Carroll Slough	4605.98	122 54.34	PV,ZC	Shoals near confluence with Columbia River during winter and spring.
25	Cowlitz R/Carroll Slough	4605.53	122 53.66	ZC	Log booms anchored along Carroll Channel used intermittently during winter and spring.
28	E Puget Island	4608.95	123 18.76	PV	Upriver end of Puget Island during winter and spring.

Region 2: Willapa Bay

Use NOAA Charts 18504 (Willapa Bay) for navigation and bathymetry details.

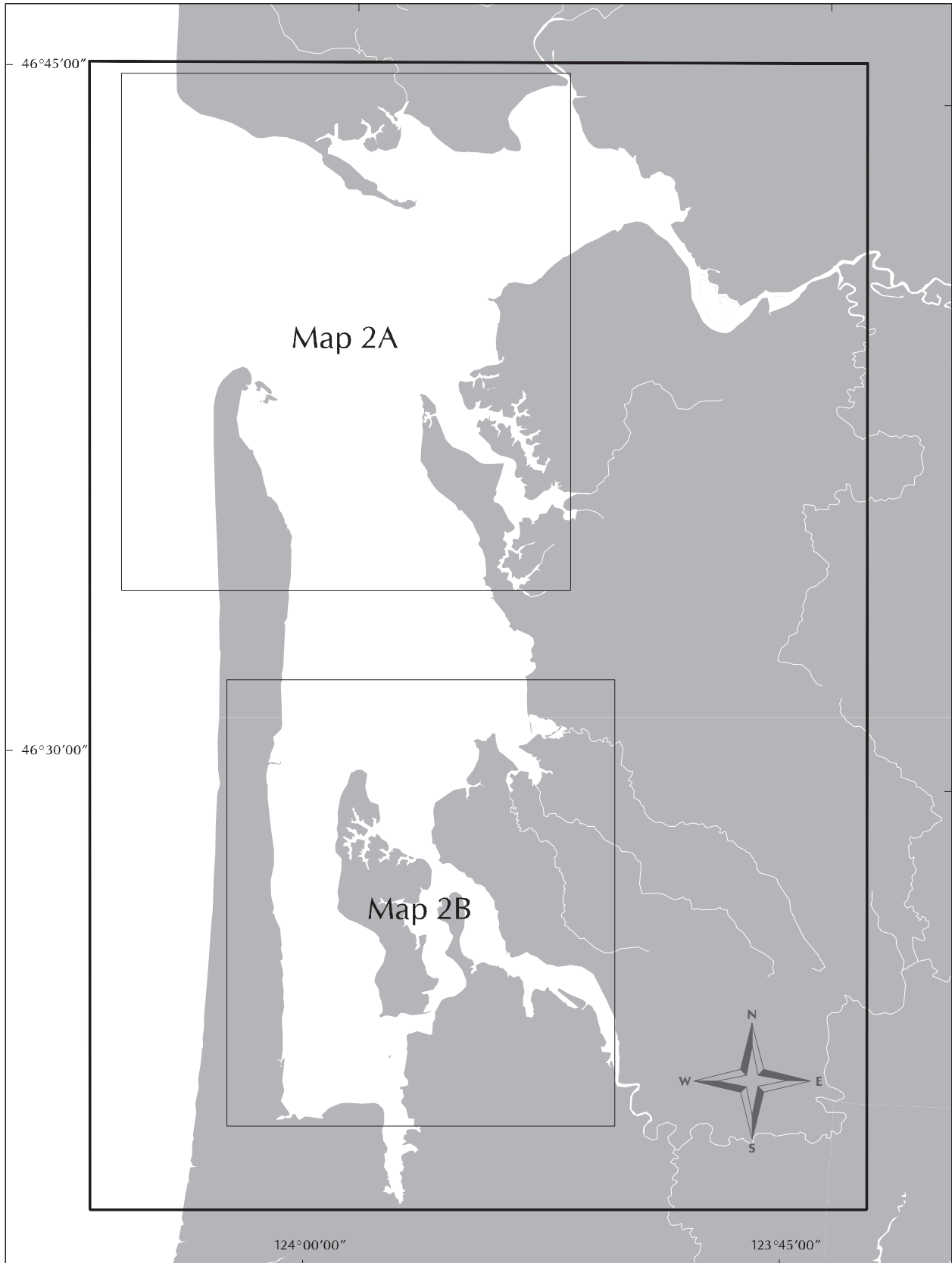
Numerous harbor seal haulout sites are located on intertidal mudflats and sand bars throughout Willapa Bay. Nursery areas are located in the areas around Pine Island Channel, Ellen Sands, Shoalwater Bay, and northeast of Long Island. Peak harbor seal abundances occur during the pupping season (mid-April through June) and annual molt (July through August). Small numbers of California sea lions may be found seasonally in Willapa Bay.



Harbor seals hauled out on intertidal shoal off Leadbetter Point, Willapa Bay, June 4, 1996.



Willapa Bay Region 2



Region 2: Willapa Bay

<u>ID</u>	<u>Location</u>	<u>Survey Code</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Species</u>	<u>Count</u>	<u>Use</u>
30	W Shoalwater Bay	02.01	4624.45	12400.05	PV	<100	LOW
31	W Shoalwater Bay	02.01	4624.54	12400.18	PV	<100	LOW
32	Shoalwater Bay Middle	02.02	4624.34	12359.32	PV	<100	LOW
33	SW of Long Island	02.03	4625.64	12358.87	PV	<100	LOW
34	NE of Long Island South	02.04	4629.24	12356.83	PV	100-500	LOW
35	NE of Long Island Middle	02.05	4629.76	12357.38	PV	<100	LOW
36	NE of Long Island North	02.06	4630.79	12357.11	PV	<100	LOW
37	NE of Long Island North	02.06	4631.32	12356.89	PV	<100	LOW
38	Riddle Spit Area	02.07	4634.94	12400.60	PV	<100	LOW
39	S of Grassy Island	02.08	4637.06	12401.38	PV	<100	LOW
40	Ellen Sands	02.09	4638.72	12358.10	PV	<100	LOW
41	Ellen Sands	02.09	4639.11	12359.23	PV	<100	LOW
42	Ellen Sands	02.09	4639.74	12359.27	PV	<100	LOW
43	Ellen Sands	02.09	4640.58	12359.05	PV	<100	LOW
44	Pine Island Channel	02.10	4640.98	12357.64	PV	100-500	LOW
45	Pine Island Channel	02.10	4640.74	12357.67	PV	100-500	LOW
46	Pine Island Channel	02.10	4640.15	12356.95	PV	100-500	LOW
47	E of Toke Point	02.11	4642.63	12355.90	PV	<100	LOW
48	Entrance Shoals	02.12	4642.71	12403.04	PV	100-500	LOW
49	Entrance Shoals	02.12	4641.71	12402.00	PV	100-500	LOW
50	Entrance Shoals	02.12	4640.42	12400.74	PV	100-500	LOW
51	Entrance Shoals	02.12	4641.63	12405.73	PV	<100	LOW
52	Entrance Shoals	02.12	4640.65	12406.03	PV	<100	LOW
53	Leadbetter Shoals	02.13	4639.93	12403.22	PV	<100	LOW
54	Leadbetter Shoals	02.13	4638.36	12400.89	PV	100-500	LOW
55	Leadbetter Shoals	02.13	4639.83	12402.47	PV	<100	LOW
56	Leadbetter Shoals	02.13	4639.42	12402.21	PV	100-500	LOW



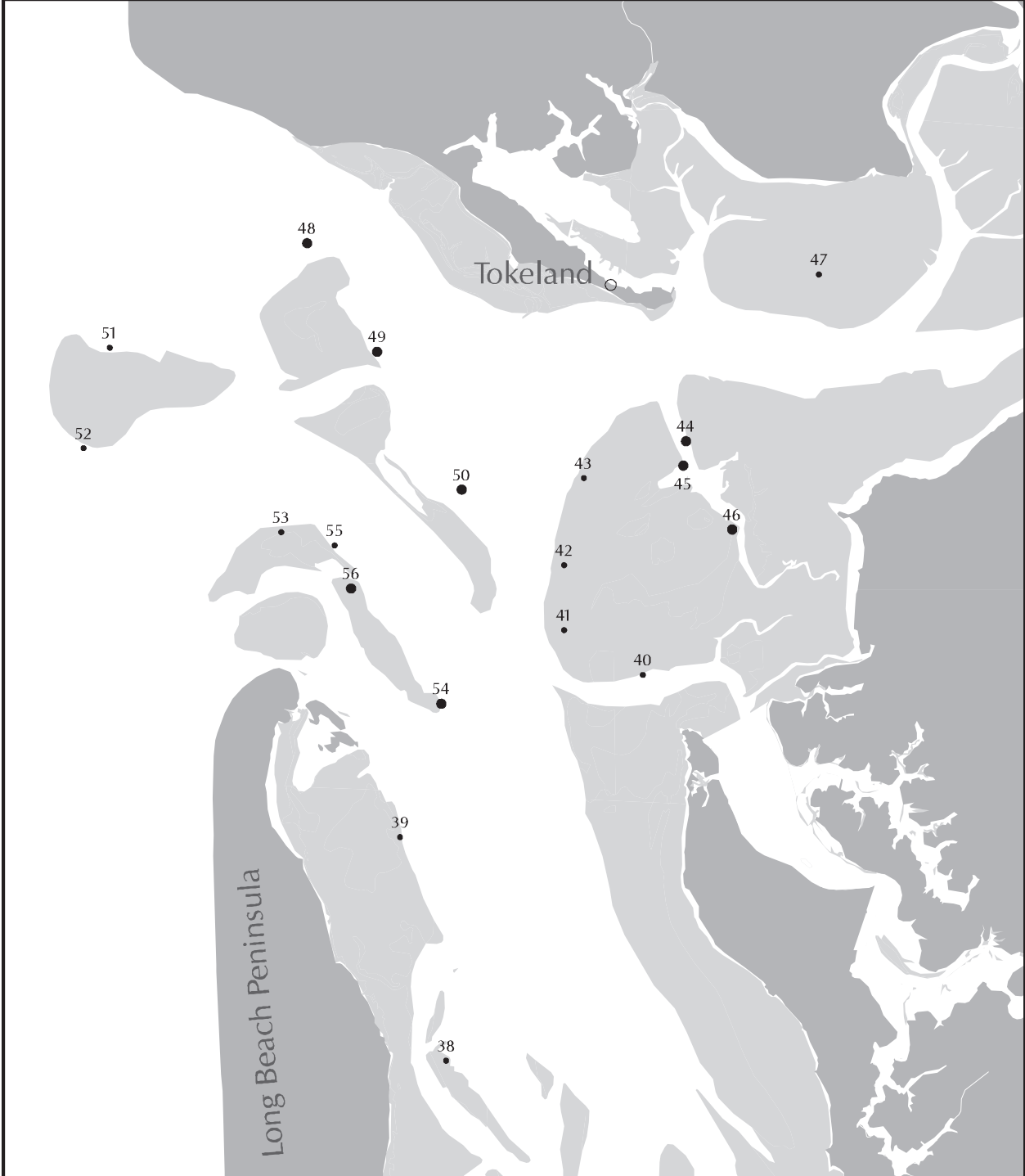
Region 2: Willapa Bay

<u>ID</u>	<u>Description</u>
30	Areas along channels on west side of Shoalwater Bay.
31	Areas along channels in west Shoalwater Bay during pupping season.
32	Areas along channels in middle Shoalwater Bay during pupping season.
33	Areas along channels southwest of Long Island during pupping season.
34	Areas along south channel. Nursery area.
35	Areas along the middle channel.
36	Areas along the north channels during pupping season.
37	Along the northern most channel with house on pilings during pupping season.
38	Intertidal areas along edge of shoal.
39	On shoals south of Grassy Island during pupping season.
40	Intertidal sand flats along Ellen Sands. Nursery area.
41	Intertidal sand flats along Ellen Sands. Nursery area.
42	Intertidal sand flats along Ellen Sands. Nursery area.
43	Intertidal sand flats along Ellen Sands. Nursery area.
44	Shoals along Pine Island channel.
45	Shoals along Pine Island channel.
46	Shoals along Pine Island channel during pupping season. Nursery area.
47	Shoals along channels east of Toke Point.
48	Along north side of main shoal in entrance to Willapa Bay.
49	Along south side of main shoal in entrance to Willapa Bay.
50	On southeast shoal in entrance to Willapa Bay.
51	On southwest shoals in entrance to Willapa Bay during pupping season.
52	On south shoals in entrance to Willapa Bay during the pupping season.
53	Along shoals north of Leadbetter Point during pupping season.
54	Shoals southeast of Leadbetter Point.
55	Shoals northeast of Leadbetter Point during pupping season.
56	On shoals east of Leadbetter Point.



Willapa Bay

Map 2A: Willapa Bay-North



LAND AREA		GROUP SIZE	<p>AREA LOCATION</p>	<p>STATUTE MILES</p> <p>Map Ratio 1: 110000</p>	
Upland	• Less than 100				
Tide Flats	● 100 to 500				
Water	● Greater than 500				



Willapa Bay
Map 2A: Willapa Bay-North

ID	Location	Latitude	Longitude	Species	Description
38	Riddle Spit Area	4634.94	12400.60	PV	Intertidal areas along edge of shoal.
39	S of Grassy Island	4637.06	12401.38	PV	On shoals south of Grassy Island during pupping season.
40	Ellen Sands	4638.72	12358.10	PV	Intertidal sand flats along Ellen Sands. Nursery area.
41	Ellen Sands	4639.11	12359.23	PV	Intertidal sand flats along Ellen Sands. Nursery area.
42	Ellen Sands	4639.74	12359.27	PV	Intertidal sand flats along Ellen Sands. Nursery area.
43	Ellen Sands	4640.58	12359.05	PV	Intertidal sand flats along Ellen Sands. Nursery area.
44	Pine Island Channel	4640.98	12357.64	PV	Shoals along Pine Island channel.
45	Pine Island Channel	4640.74	12357.67	PV	Shoals along Pine Island channel.
46	Pine Island Channel	4640.15	12356.95	PV	Shoals along Pine Island channel during pupping season. Nursery area.
47	E of Toke Point	4642.63	12355.90	PV	Shoals along channels east of Toke Point.
48	Entrance Shoals	4642.71	12403.04	PV	Along north side of main shoal in entrance to Willapa Bay.
49	Entrance Shoals	4641.71	12402.00	PV	Along south side of main shoal in entrance to Willapa Bay.
50	Entrance Shoals	4640.42	12400.74	PV	On southeast shoal in entrance to Willapa Bay.
51	Entrance Shoals	4641.63	12405.73	PV	On southwest shoals in entrance to Willapa Bay during pupping season.
52	Entrance Shoals	4640.65	12406.03	PV	On south shoals in entrance to Willapa Bay during the pupping season.
53	Leadbetter Shoals	4639.93	12403.22	PV	Along shoals north of Leadbetter Point during pupping season.
54	Leadbetter Shoals	4638.36	12400.89	PV	Shoals southeast of Leadbetter Point.
55	Leadbetter Shoals	4639.83	12402.47	PV	Shoals northeast of Leadbetter Point during pupping season.
56	Leadbetter Shoals	4639.42	12402.21	PV	On shoals east of Leadbetter Point.



Willapa Bay

Map 2B: Willapa Bay-South



Willapa Bay

Map 2B: Willapa Bay-South

<u>ID</u>	<u>Location</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Species</u>	<u>Description</u>
30	W Shoalwater Bay	4624.45	12400.05	PV	Areas along channels on west side of Shoalwater Bay.
31	W Shoalwater Bay	4624.54	12400.18	PV	Areas along channels in west Shoalwater Bay during pupping season.
32	Shoalwater Bay Middle	4624.34	12359.32	PV	Areas along channels in middle Shoalwater Bay during pupping season.
33	SW of Long Island	4625.64	12358.87	PV	Areas along channels southwest of Long Island during pupping season.
34	NE of Long Island South	4629.24	12356.83	PV	Areas along south channel. Nursery area.
35	NE of Long Island Middle	4629.76	12357.38	PV	Areas along the middle channel.
36	NE of Long Island North	4630.79	12357.11	PV	Areas along the north channels during pupping season.
37	NE of Long Island North	4631.32	12356.89	PV	Along the northern most channel with house on pilings during pupping season.



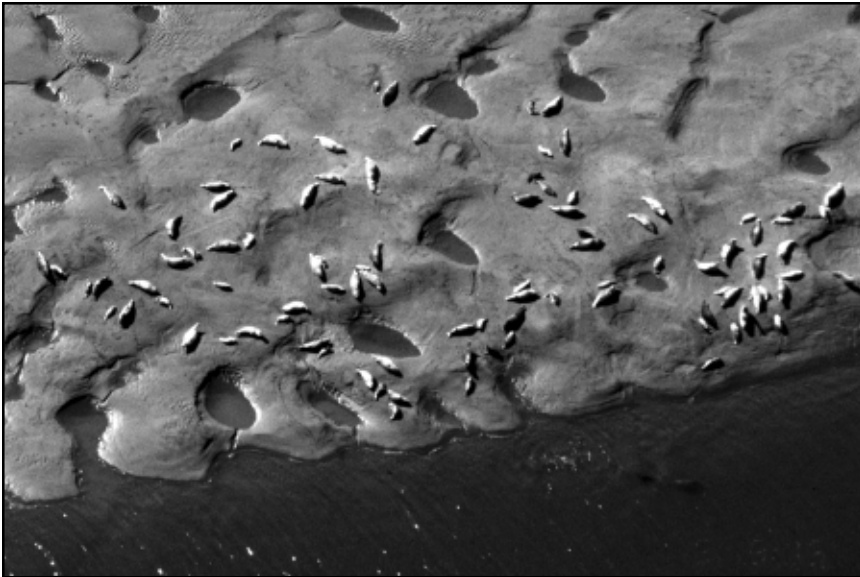
Harbor seals hauled out along channel in Shoalwater Bay, June 4, 1992.



Region 3: Grays Harbor

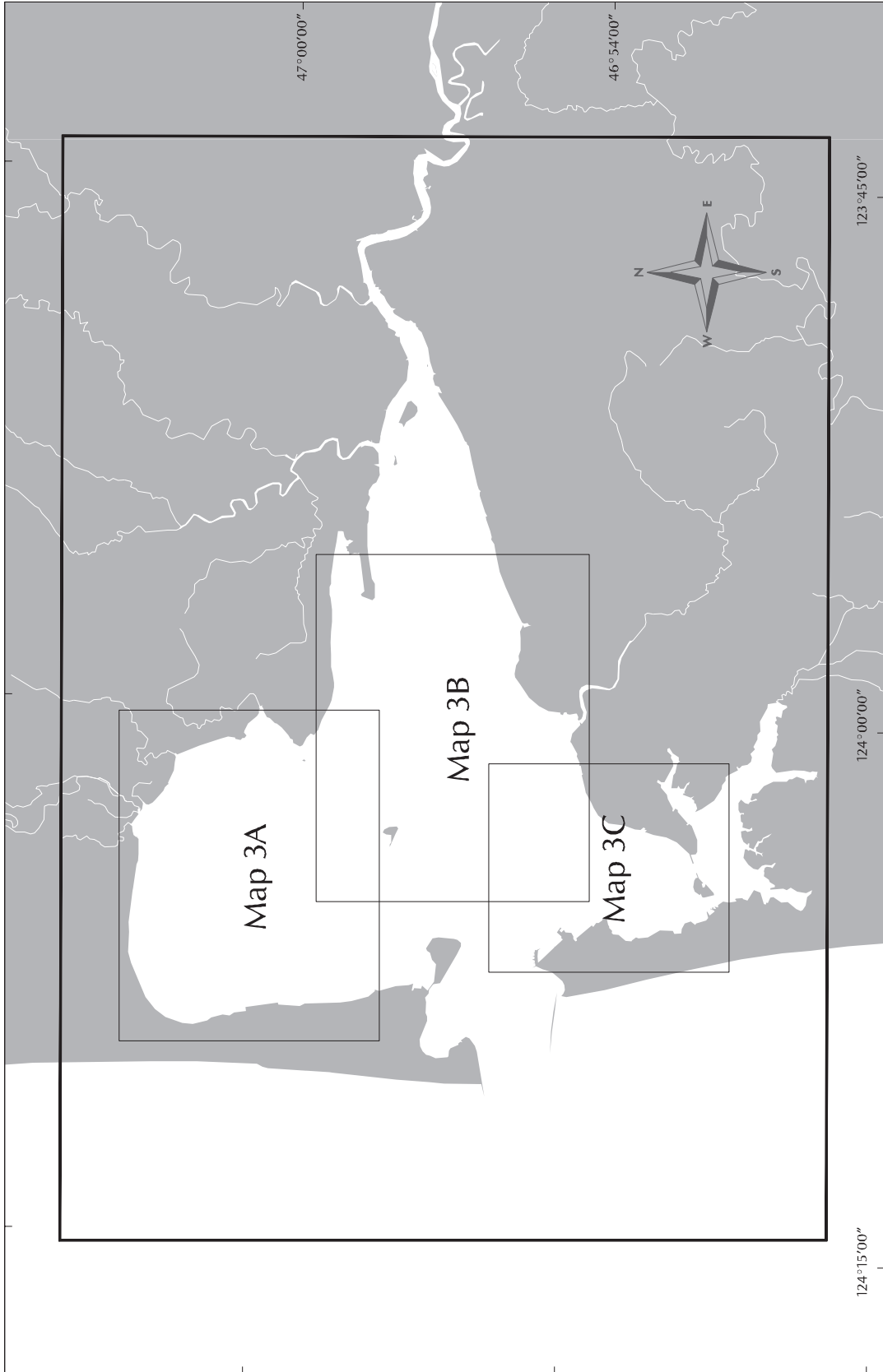
Use NOAA Charts 18502 (Grays Harbor) for navigation and bathymetry details.

Numerous harbor seal haulout sites are located on intertidal mudflats and sand bars throughout Grays Harbor. Nursery areas are located in the areas around Whitcomb Flats, Mid-Harbor Flats, Sand Island shoals, Sand Island, Goose Island, Chenoise Creek channels, and in North Bay. Peak harbor seal abundances occur during the pupping season (mid-April through June) and the annual molt (July through August). Small numbers of California sea lions may be found seasonally in Grays Harbor foraging or on docks in the Westport Marina.



Harbor seals hauled out on intertidal shoal in Grays Harbor, June 5, 1996.

Grays Harbor Region 3



Region 3: Grays Harbor

<u>ID</u>	<u>Location</u>	<u>Survey Code</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Species</u>	<u>Count</u>	<u>Use</u>
57	South Bay	03.01	4652.83	12404.08	PV	<100	LOW
58	Whitcomb Flats N	03.02	4654.98	12404.64	PV	100-500	LOW
59	E of Whitcomb Flats	03.03	4655.04	12402.27	PV	<100	LOW
60	E of Whitcomb Flats	03.03	4654.81	12403.02	PV	<100	LOW
61	E of Whitcomb Flats	03.03	4654.43	12402.88	PV	<100	LOW
62	Midharbor Flats	03.04	4656.93	12358.42	PV	<100	LOW
63	Midharbor Flats	03.04	4656.32	12359.94	PV	100-500	LOW
64	Midharbor Flats	03.04	4656.11	12356.89	PV	<100	LOW
65	Sand Island Shoals	03.05	4657.35	12359.81	PV	100-500	LOW
66	Sand Island Shoals Area	03.05	4657.50	12359.92	PV	100-500	LOW
67	Sand Island Shoals Area	03.06	4656.88	12401.13	PV	<100	LOW
68	Sand Island Shoals Area	03.06	4656.91	12401.61	PV	500>	LOW
69	Sand Island Shoals Area	03.07	4657.11	12402.05	PV	<100	LOW
70	Sand Island Shoals Area	03.07	4657.19	12401.42	PV	<100	LOW
71	Sand Island Shoals Area	03.07	4656.71	12402.15	PV	500>	LOW
72	Sand Island Shoals Area	03.07	4656.45	12402.81	PV	<100	LOW
73	Sand Island Shoals Area	03.08	4657.03	12402.42	PV	<100	LOW
74	S Side of Sand Island	03.09	4657.38	12402.90	PV	100-500	LOW
75	S of Sand Island	03.09	4657.58	12403.07	PV	100-500	LOW
76	S Side of Sand Island	03.09	4657.26	12403.31	PV	100-500	LOW
77	S Side of Sand Island	03.09	4658.03	12402.09	PV	<100	LOW
78	S Side of Sand Island	03.09	4657.61	12403.40	PV	<100	LOW
79	N Side of Sand Island	03.10	4657.82	12403.37	PV	100-500	LOW
80	NW of Sand Island	03.11	4658.01	12403.83	PV	100-500	LOW
81	NW of Sand Island	03.11	4657.68	12403.99	PV	<100	LOW
82	S Side of Goose Island	03.12	4658.56	12403.85	PV	100-500	LOW
83	NW End of Goose Island	03.13	4658.91	12404.27	PV	<100	LOW
84	East Bay/Chenois Creek	03.14	4659.93	12402.78	PV	<100	LOW
85	East Bay/Chenois Creek	03.14	4701.47	12402.73	PV	<100	LOW
86	East Bay/Chenois Creek	03.14	4701.39	12402.09	PV	<100	LOW
87	East Bay/Chenois Creek	03.14	4700.79	12402.06	PV	<100	LOW
88	East Bay/Chenois Creek	03.14	4700.45	12402.32	PV	<100	LOW
89	East Bay/Small Channel	03.15	4700.27	12402.92	PV	100-500	LOW
90	East Bay/Main Channel	03.16	4700.78	12403.05	PV	<100	LOW
91	Shoals NW of Goose Island	03.17	4659.23	12404.66	PV	<100	LOW
92	Shoals NW of Goose Island	03.17	4659.65	12405.98	PV	100-500	LOW
93	Shoals E of Ocean Shores	03.18	4658.09	12407.59	PV	100-500	LOW
94	N of Campbell Slough	03.19	4700.45	12405.91	PV	<100	LOW
95	North Bay/West Channel	03.20	4701.15	12406.59	PV	100-500	LOW
96	North Bay/West Channel	03.20	4701.54	12407.01	PV	<100	LOW
97	North Bay/West Channel	03.20	4700.82	12405.89	PV	100-500	LOW
98	North Bay/East Channel	03.21	4701.92	12405.54	PV	<100	LOW
99	North Bay/East Channel	03.21	4701.55	12405.72	PV	100-500	LOW
100	North Bay/East Channel	03.21	4701.21	12405.45	PV	<100	LOW
101	North Bay/NW Channel	03.22	4701.36	12408.17	PV	<100	LOW



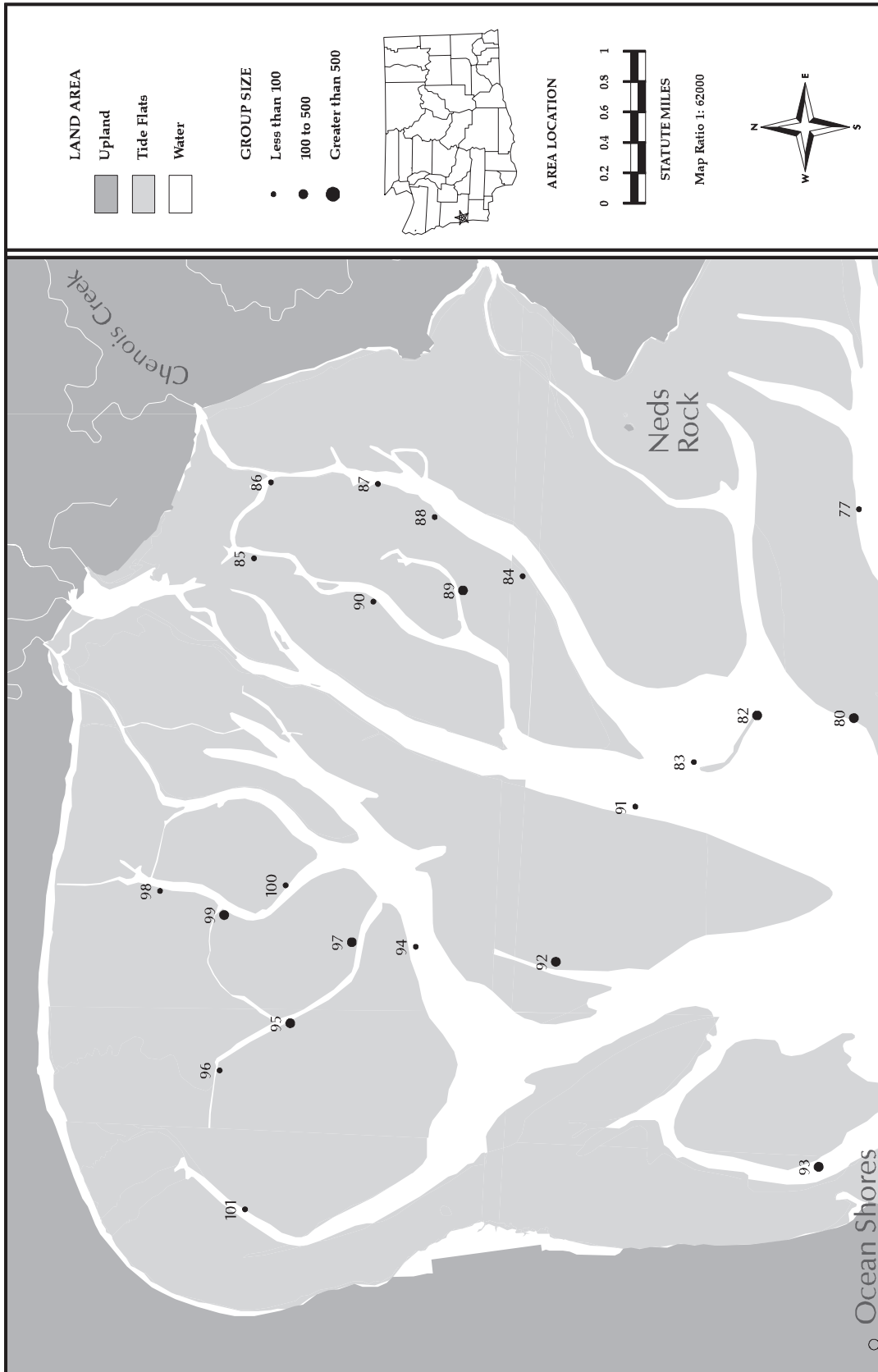
Region 3: Grays Harbor

<u>ID</u>	<u>Description</u>
57	Along intertidal channels on east side of bay.
58	Along north side of Whitcomb Flats.
59	Along south side of shoal east of Whitcomb Flats during pupping season.
60	Along south side of shoal east of Whitcomb Flats during pupping season.
61	On shoal southeast of Whitcomb Flats.
62	On shoals on north side of midharbor flats during pupping season.
63	On shoals on northwest side of midharbor flats during pupping season. Nursery area.
64	Shoals along south side of midharbor flats during pupping season.
65	On east side of shoal near rangefinders during pupping season. Nursery area.
66	On north side of shoal near rangefinders during pupping season.
67	On south side of south shoal during pupping season.
68	On north side of south shoal.
69	On north side of middle shoal during pupping season.
70	Along southeast side of middle shoal during pupping season.
71	Along south side of middle shoal.
72	Along southwest side of middle shoal during pupping season.
73	On south side of the north shoal during pupping season.
74	Shoals across channel on south side of island. Nursery area.
75	Along channel on south side of island. Nursery area.
76	Along channel on south side of island. Nursery area.
77	Along channel on south side of island. Nursery area.
78	Along channel on south side of island. Nursery area.
79	Along channel on north side of island. Nursery area.
80	On northwest tip of Sand Island.
81	Shoals west of Sand Island during pupping season.
82	Along channel on the south side of Goose Island. Nursery area.
83	Northwest tip of Goose Island during pupping season.
84	Along Chenois Creek channel during pupping season.
85	Along Chenois Creek channel during pupping season.
86	Along Chenois Creek channel during pupping season.
87	Along Chenois Creek channel during pupping season.
88	Along Chenois Creek channel during pupping season.
89	Along small deadend channel in East Bay. Nursery area.
90	Along main channel in East Bay during pupping season.
91	Along channel in shoals northwest of Goose Island during pupping season.
92	Along channel in shoal northwest of Goose Island.
93	Shoals along channel east of Oyehut/Ocean Shores. Nursery area.
94	Mud flats along Campbell Slough during pupping season.
95	Mud flats along the west channel into North Bay. Nursery area.
96	Mud flats along the west channel into North Bay. Nursery area.
97	Mud flats along the west channel into North Bay. Nursery area.
98	Mud flats along the east channel into North Bay. Nursery area.
99	Mud flats along the east channel into North Bay.
100	Mud flats along the east channel into North Bay. Nursery area.
101	Mud flats along the northwest most channel into North Bay during pupping season.



Grays Harbor

Map 3A: Grays Harbor-North



Grays Harbor

Map 3A: Grays Harbor-North

ID	Location	Latitude	Longitude	Species	Description
77	S Side of Sand Island	4658.03	12402.09	PV	Along channel on south side of island. Nursery area.
80	NW of Sand Island	4658.01	12403.83	PV	On northwest tip of Sand Island.
82	S Side of Goose Island	4658.56	12403.85	PV	Along channel on the south side of Goose Island. Nursery area.
83	NW End of Goose Island	4658.91	12404.27	PV	Northwest tip of Goose Island during pupping season.
84	East Bay/Chenois Creek	4659.93	12402.78	PV	Along Chenois Creek channel during pupping season.
85	East Bay/Chenois Creek	4701.47	12402.73	PV	Along Chenois Creek channel during pupping season.
86	East Bay/Chenois Creek	4701.39	12402.09	PV	Along Chenois Creek channel during pupping season.
87	East Bay/Chenois Creek	4700.79	12402.06	PV	Along Chenois Creek channel during pupping season.
88	East Bay/Chenois Creek	4700.45	12402.32	PV	Along Chenois Creek channel during pupping season.
89	East Bay/Small Channel	4700.27	12402.92	PV	Along small deadend channel in East Bay. Nursery area.
90	East Bay/Main Channel	4700.78	12403.05	PV	Along main channel in East Bay during pupping season.
91	Shoals NW of Goose Island	4659.23	12404.66	PV	Along channel in shoals northwest of Goose Island during pupping season.
92	Shoals NW of Goose Island	4659.65	12405.98	PV	Along channel in shoal northwest of Goose Island.
93	Shoals E of Ocean Shores	4658.09	12407.59	PV	Shoals along channel east of Oyehut/Ocean Shores. Nursery area.
94	N of Campbell Slough	4700.45	12405.91	PV	Mud flats along Campbell Slough during pupping season.
95	North Bay/West Channel	4701.15	12406.59	PV	Mud flats along the west channel into North Bay. Nursery area.
96	North Bay/West Channel	4701.54	12407.01	PV	Mud flats along the west channel into North Bay. Nursery area.
97	North Bay/West Channel	4700.82	12405.89	PV	Mud flats along the west channel into North Bay. Nursery area.
98	North Bay/East Channel	4701.92	12405.54	PV	Mud flats along the east channel into North Bay. Nursery area.
99	North Bay/East Channel	4701.55	12405.72	PV	Mud flats along the east channel into North Bay.
100	North Bay/East Channel	4701.21	12405.45	PV	Mud flats along the east channel into North Bay. Nursery area.
101	North Bay/NW Channel	4701.36	12408.17	PV	Mud flats along the northwest most channel into North Bay during pupping season.



Grays Harbor

Map 3B: Grays Harbor-Central



Grays Harbor

Map 3B: Grays Harbor-Central

ID	Location	Latitude	Longitude	Species	Description
58	Whitcomb Flats N	4654.98	12404.64	PV	Along north side of Whitcomb Flats.
59	E of Whitcomb Flats	4655.04	12402.27	PV	Along south side of shoal east of Whitcomb Flats during pupping season.
60	E of Whitcomb Flats	4654.81	12403.02	PV	Along south side of shoal east of Whitcomb Flats during pupping season.
61	E of Whitcomb Flats	4654.43	12402.88	PV	On shoal southeast of Whitcomb Flats.
62	Midharbor Flats	4656.93	12358.42	PV	On shoals on north side of midharbor flats during pupping season.
63	Midharbor Flats	4656.32	12359.94	PV	On shoals on northwest side of midharbor flats during pupping season. Nursery area.
64	Midharbor Flats	4656.11	12356.89	PV	Shoals along south side of midharbor flats during pupping season.
65	Sand Island Shoals	4657.35	12359.81	PV	On east side of shoal near rangefinders during pupping season. Nursery area.
66	Sand Island Shoals Area	4657.50	12359.92	PV	On north side of shoal near rangefinders during pupping season.
67	Sand Island Shoals Area	4656.88	12401.13	PV	On south side of south shoal during pupping season.
68	Sand Island Shoals Area	4656.91	12401.61	PV	On north side of south shoal.
69	Sand Island Shoals Area	4657.11	12402.05	PV	On north side of middle shoal during pupping season.
70	Sand Island Shoals Area	4657.19	12401.42	PV	Along southeast side of middle shoal during pupping season.
71	Sand Island Shoals Area	4656.71	12402.15	PV	Along south side of middle shoal.
72	Sand Island Shoals Area	4656.45	12402.81	PV	Along southwest side of middle shoal during pupping season.
73	Sand Island Shoals Area	4657.03	12402.42	PV	On south side of the north shoal during pupping season.
74	S Side of Sand Island	4657.38	12402.90	PV	Shoals across channel on south side of island. Nursery area.
75	S of Sand Island	4657.58	12403.07	PV	Along channel on south side of island. Nursery area.
76	S Side of Sand Island	4657.26	12403.31	PV	Along channel on south side of island. Nursery area.
77	S Side of Sand Island	4658.03	12402.09	PV	Along channel on south side of island. Nursery area.
78	S Side of Sand Island	4657.61	12403.40	PV	Along channel on south side of island. Nursery area.
79	N Side of Sand Island	4657.82	12403.37	PV	Along channel on north side of island. Nursery area.
80	NW of Sand Island	4658.01	12403.83	PV	On northwest tip of Sand Island.
81	NW of Sand Island	4657.68	12403.99	PV	Shoals west of Sand Island during pupping season.
82	S Side of Goose Island	4658.56	12403.85	PV	Along channel on the south side of Goose Island. Nursery area.
83	NW End of Goose Island	4658.91	12404.27	PV	Northwest tip of Goose Island during pupping season.



Grays Harbor

Map 3C: Grays Harbor-South



Grays Harbor

Map 3C: Grays Harbor-South

<u>ID</u>	<u>Location</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Species</u>	<u>Description</u>
57	South Bay	4652.83	12404.08	PV	Along intertidal channels on east side of bay.
58	Whitcomb Flats N	4654.98	12404.64	PV	Along north side of Whitcomb Flats.
59	E of Whitcomb Flats	4655.04	12402.27	PV	Along south side of shoal east of Whitcomb Flats during pupping season.
60	E of Whitcomb Flats	4654.81	12403.02	PV	Along south side of shoal east of Whitcomb Flats during pupping season.
61	E of Whitcomb Flats	4654.43	12402.88	PV	On shoal southeast of Whitcomb Flats.



Harbor seals on beach on north side of Whitcomb Flats, June 4, 1992.

Region 4: Olympic Coast-South

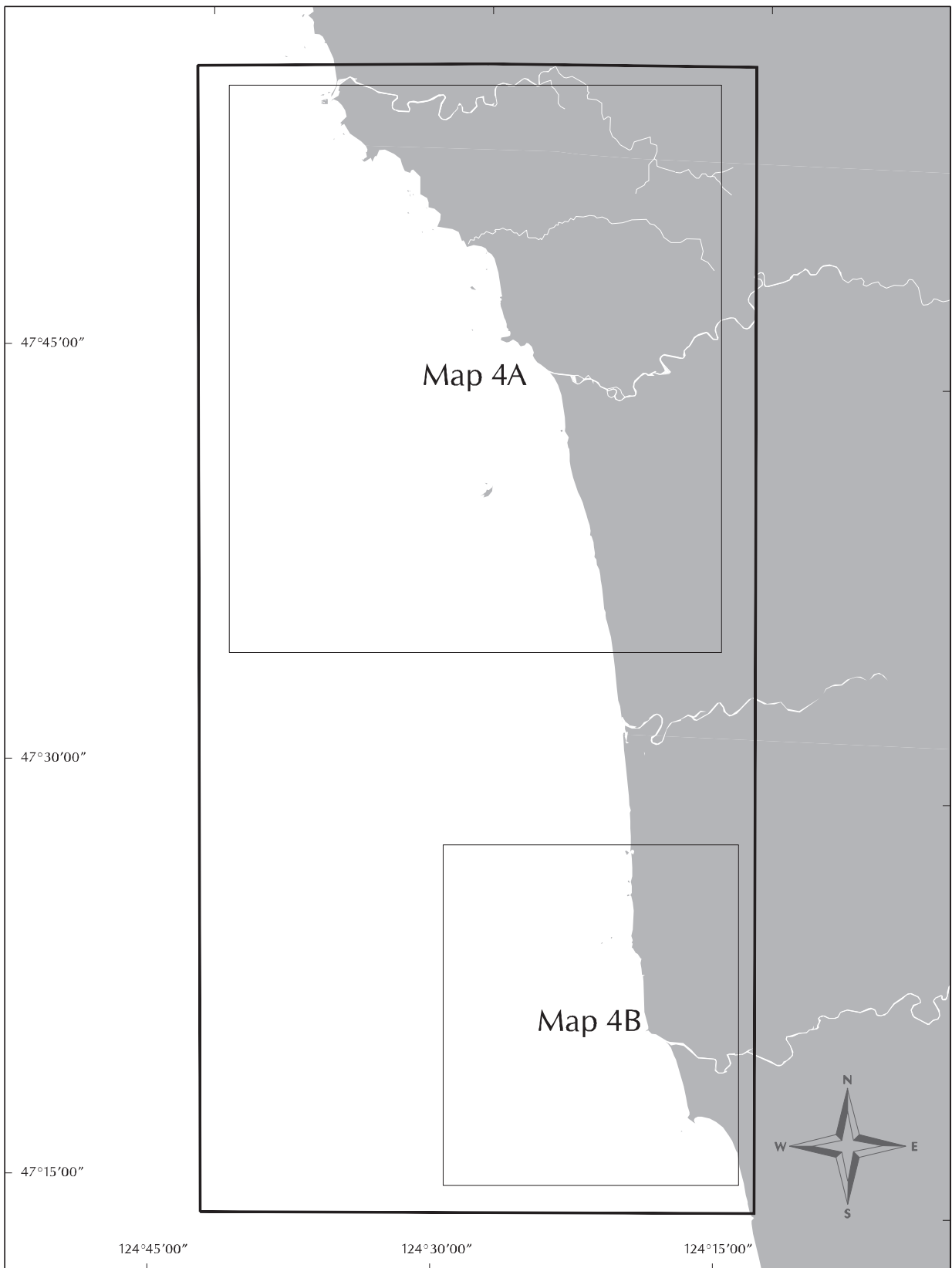
Use NOAA Charts 18500 (Columbia River to Destruction Island) and 18480 (Approaches to Strait of Juan de Fuca-Destruction Island to Amphitrite Point) for navigation and bathymetry details.

Numerous harbor seal haulout sites are located on intertidal rocks and reefs in this region. Peak abundances of harbor seals occur during the pupping season (June through early August) and annual molt (mid-August through September). Large numbers of Steller sea lions use a number of offshore rocks in the vicinity of Split Rock seasonally. Small numbers of California sea lions may also be found at these same sites.



Harbor seals resting on cobble beach on east end of Destruction Island, November 18, 1997.

Olympic Coast-South Region 4: Quillayute River to Point Grenville



Region 4: Olympic Coast-South

<u>ID</u>	<u>Location</u>	<u>Survey Code</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Species</u>	<u>Count</u>	<u>Use</u>
102	Cape Elizabeth	04.01	4721.32	12419.19	PV	100-500	LOW
103	S of Split Rock	04.02	4723.99	12421.58	EJ,ZC	100-500	ALL
104	Split Rock Area	04.03	4724.39	12421.76	EJ,ZC	100-500	ALL
105	Split Rock Area	04.03	4724.44	12421.50	EJ	<100	ALL
106	Split Rock Area	04.03	4724.32	12421.47	EJ	<100	ALL
107	Sea Lion Rock	04.04	4727.00	12424.20	PV	<100	LOW
108	Destruction Island/W End	04.05	4740.35	12429.30	PV	<100	LOW
109	Destruction Island/NE End	04.06	4740.73	12428.76	PV,MA	100-500	LOW
110	Islet N of Hoh River	04.07	4745.23	12427.24	PV	100-500	LOW
111	Alexander Island	04.08	4747.90	12430.23	PV	<100	LOW
112	Goodman Creek Area	04.09	4749.24	12430.66	PV	100-500	LOW
113	S of Toleak Point	04.10	4749.64	12432.15	PV	100-500	LOW
114	Toleak Point	04.11	4749.96	12432.60	PV	100-500	LOW
115	N of Toleak Point	04.12	4750.24	12432.65	PV	<100	LOW
116	Strawberry Point	04.13	4750.70	12433.30	PV	100-500	LOW
117	Giants Graveyard	04.14	4751.18	12434.00	PV	100-500	LOW
118	Giants Graveyard	04.14	4751.01	12433.76	PV	100-500	LOW
119	NE of Giants Graveyard	04.15	4751.61	12433.74	PV	<100	LOW
120	S Side Teawhit Head	04.16	4752.26	12436.37	PV	<100	LOW
121	Quillayute Needles	04.17	4753.02	12438.08	PV	100-500	LOW
122	Point Grenville	04.18	4718.09	12416.55	PV	<100	LOW
123	Kalaloch Rocks	04.20	4736.11	12422.71	PV	<100	LOW
124	Perkins Reef Area	04.21	4746.79	12429.63	PV	<100	LOW
125	Flat Rock	04.22	4722.68	12420.72	PV	<100	LOW
126	Willoughby Rock	04.23	4724.64	12421.20	PV	<100	LOW



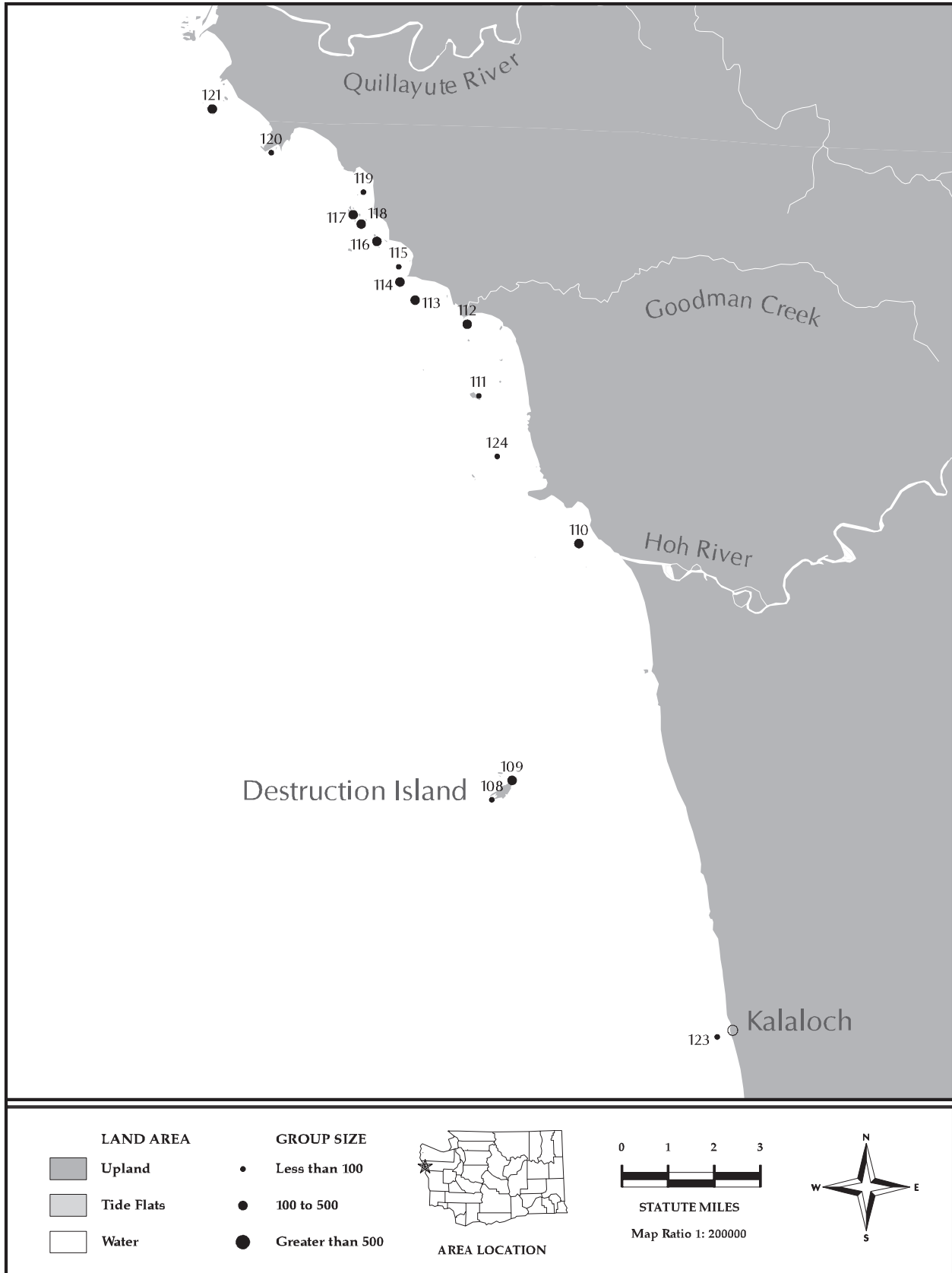
Harbor seals hauled out on rocks north of Hoh River, April 22, 1977.

Region 4: Olympic Coast-South

ID	Description
102	Intertidal reef areas off Cape Elizabeth.
103	Unnamed rock (USFWS ID 535) south of Spit Rock.
104	Along the west and south sides of Split Rock.
105	Small intertidal rock (USFWS ID 533) to east of Split Rock.
106	Small intertidal rock (USFWS ID 534) to east of Split Rock.
107	Sea Lion Rock (USFWS ID 502) about 3 miles northwest of Split Rock.
108	Along intertidal channel and reef areas on west end of island.
109	On intertidal reefs and main beach area on the northeast end of island. MA's in winter and spring.
110	On intertidal reefs just north of the Hoh River.
111	Intertidal areas along the east side of Alexander Island.
112	Intertidal rocks on south side of Goodman Creek.
113	Intertidal reef area south of Toleak Point.
114	Intertidal reef areas at Toleak Point.
115	Intertidal reefs and rocks in bay north of Toleak Point. Nursery area.
116	Intertidal areas at Strawberry Point.
117	Intertidal areas at Giants Graveyard. Nursery area.
118	Intertidal areas at Giants Graveyard. Nursery area.
119	Intertidal areas northeast of Giants Graveyard during pupping season.
120	Intertidal reef areas along the south side of Teawhit Head.
121	Intertidal areas on west side of Quillayute Needles.
122	Intertidal areas at Point Grenville. Intermittent use.
123	Intertidal reef area at Kalaloch Rocks. Intermittent use.
124	Reef areas inshore from Perkins Reef. Intermittent use.
125	Flat Rock (USFWS ID 539). Intermittent use.
126	South side of Willoughby Rock on intertidal rocks and reefs.

Olympic Coast-South

Map 4A: Quillayute River to Kalaloch



Olympic Coast-South

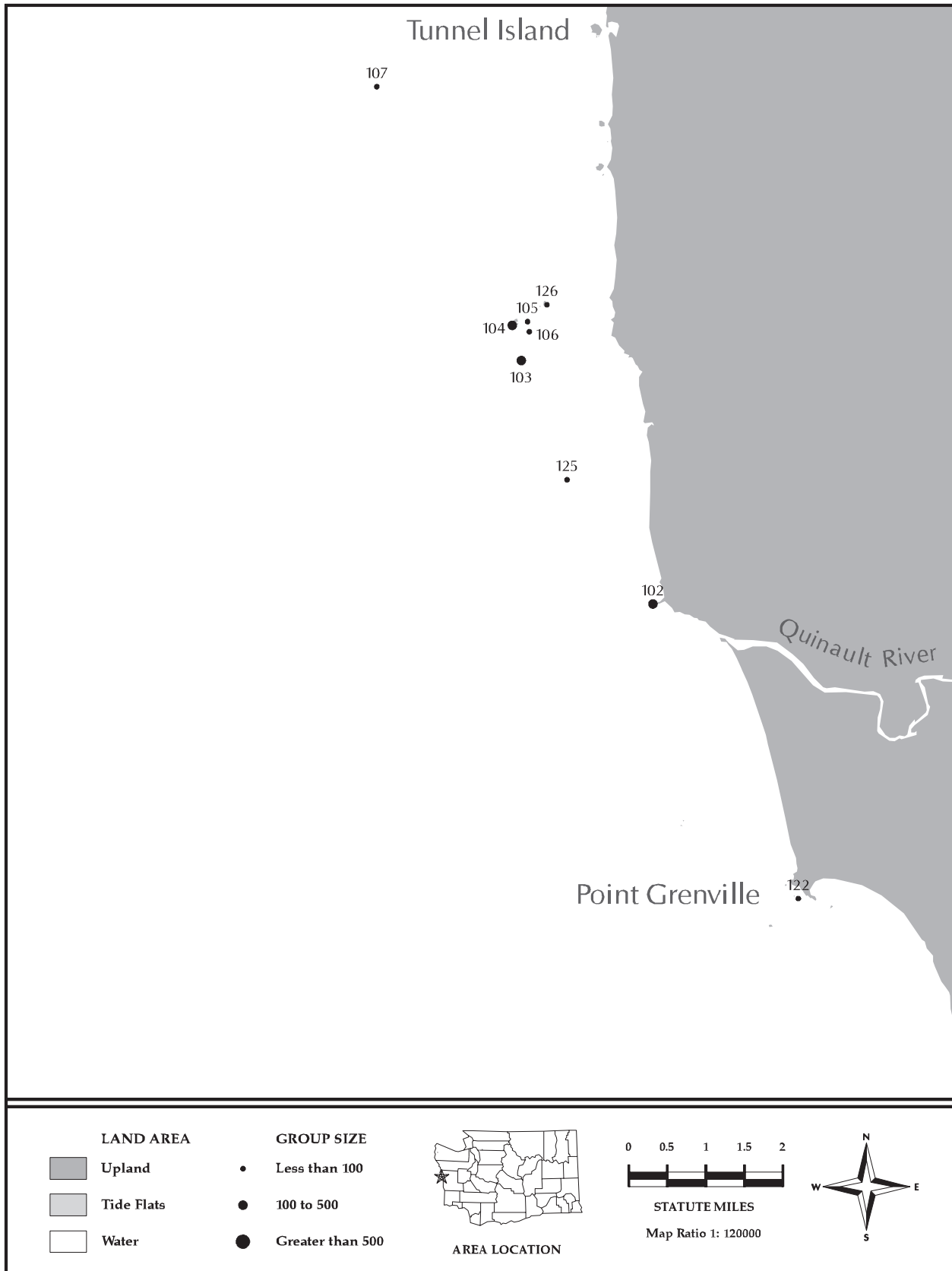
Map 4A: Quillayute River to Kalaloch

ID	Location	Latitude	Longitude	Species	Description
108	Destruction Island/W End	4740.35	12429.30	PV	Along intertidal channel and reef areas on west end of island.
109	Destruction Island/NE End	4740.73	12428.76	PV,MA	On intertidal reefs and main beach area on the northeast end of island. MA's in winter and spring.
110	Islet N of Hoh River	4745.23	12427.24	PV	On intertidal reefs just north of the Hoh River.
111	Alexander Island	4747.90	12430.23	PV	Intertidal areas along the east side of Alexander Island.
112	Goodman Creek Area	4749.24	12430.66	PV	Intertidal rocks on south side of Goodman Creek.
113	S of Toleak Point	4749.64	12432.15	PV	Intertidal reef area south of Toleak Point.
114	Toleak Point	4749.96	12432.60	PV	Intertidal reef areas at Toleak Point.
115	N of Toleak Point	4750.24	12432.65	PV	Intertidal reefs and rocks in bay north of Toleak Point. Nursery area.
116	Strawberry Point	4750.70	12433.30	PV	Intertidal areas at Strawberry Point.
117	Giants Graveyard	4751.18	12434.00	PV	Intertidal areas at Giants Graveyard. Nursery area.
118	Giants Graveyard	4751.01	12433.76	PV	Intertidal areas at Giants Graveyard. Nursery area.
119	NE of Giants Graveyard	4751.61	12433.74	PV	Intertidal areas northeast of Giants Graveyard during pupping season.
120	S Side Teawhit Head	4752.26	12436.37	PV	Intertidal reef areas along the south side of Teawhit Head.
121	Quillayute Needles	4753.02	12438.08	PV	Intertidal areas on west side of Quillayute Needles.
123	Kalaloch Rocks	4736.11	12422.71	PV	Intertidal reef area at Kalaloch Rocks. Intermittent use.
124	Perkins Reef Area	4746.79	12429.63	PV	Reef areas inshore from Perkins Reef. Intermittent use.



Olympic Coast-South

Map 4B: Tunnel Island to Point Grenville



Olympic Coast-South

Map 4B: Tunnel Island to Point Grenville

<u>ID</u>	<u>Location</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Species</u>	<u>Description</u>
102	Cape Elizabeth	47 21.32	124 19.19	PV	Intertidal reef areas off Cape Elizabeth.
103	S of Split Rock	47 23.99	124 21.58	EJ,ZC	Unnamed rock (USFWS ID 535) south of Spit Rock.
104	Split Rock Area	47 24.39	124 21.76	EJ,ZC	Along the west and south sides of Split Rock.
105	Split Rock Area	47 24.44	124 21.50	EJ	Small intertidal rock (USFWS ID 533) to east of Split Rock.
106	Split Rock Area	47 24.32	124 21.47	EJ	Small intertidal rock (USFWS ID 534) to east of Split Rock.
107	Sea Lion Rock	47 27.00	124 24.20	PV	Sea Lion Rock (USFWS ID 502) about 3 miles northwest of Split Rock.
122	Point Grenville	47 18.09	124 16.55	PV	Intertidal areas at Point Grenville. Intermittent use.
125	Flat Rock	47 22.68	124 20.72	PV	Flat Rock (USFWS ID 539). Intermittent use.
126	Willoughby Rock	47 24.64	124 21.20	PV	South side of Willoughby Rock on intertidal rocks and reefs.

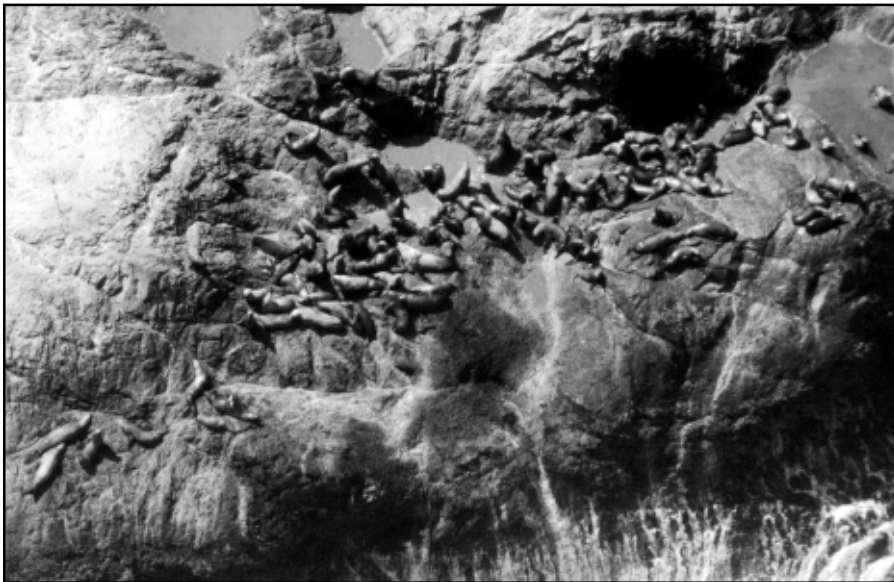


Steller sea lions on unnamed rock (USFWS ID 535) just south of Split Rock, August 2, 1978.

Region 5: Olympic Coast-North

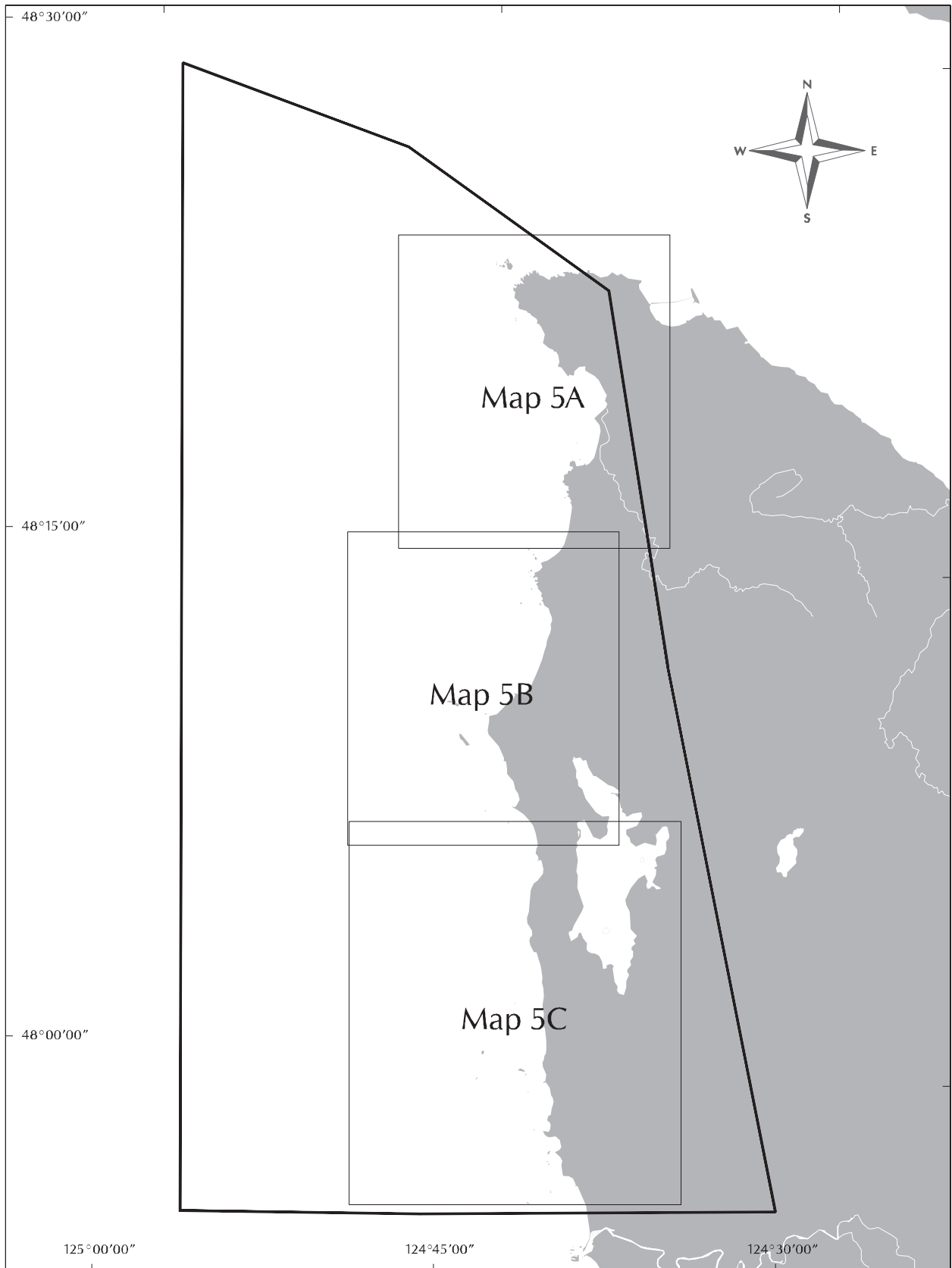
Use NOAA Charts 18480 (Approaches to Strait of Juan de Fuca-Destruction Island to Amphitrite Point) and 18460 (Strait of Juan de Fuca Entrance) for navigation and bathymetry details.

Numerous harbor seal haulout sites are present on intertidal areas around islands, rocks and reefs. Peak abundances of harbor seals occur during the pupping season (June through early August) and annual molt (mid-August through September). Main Steller and California sea lion haulout sites are at Carroll Island, Bodeliteh Islands, Cape Alava and Tatoosh Island.



Steller sea lions resting on unnamed rock west of Bodeliteh Island, July 7, 1993.

Olympic Coast-North Region 5: Cape Flattery to Quillayute River



Region 5: Olympic Coast-North

<u>ID</u>	<u>Location</u>	<u>Survey Code</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Species</u>	<u>Count</u>	<u>Use</u>
127	S of Cape Johnson	05.01	4757.16	12440.25	PV	100-500	LOW
128	S of Cape Johnson	05.01	4757.40	12440.30	PV	100-500	LOW
129	S of Cape Johnson	05.01	4757.65	12439.95	PV	100-500	LOW
130	N of Cape Johnson	05.02	4758.51	12441.03	PV	100-500	LOW
131	Sandy Island	05.03	4759.21	12441.24	PV	100-500	LOW
132	Reef NE of Sandy Island	05.04	4759.48	12440.82	PV	100-500	LOW
133	Sea Lion Rock	05.05	4759.59	12443.45	PV,EJ,ZC	<100	LOW
134	Carroll Island	05.06	4800.34	12443.33	EJ,ZC	100-500	ALL
135	E of Jagged Island	05.07	4759.78	12441.48	PV	100-500	LOW
136	S Cedar Creek Area	05.08	4801.22	12441.11	PV	<100	LOW
137	N Cedar Creek Area	05.08	4801.78	12441.19	PV	100-500	LOW
138	Norwegian Memorial Area	05.08	4801.52	12441.04	PV	100-500	LOW
139	S Yellow Banks	05.09	4805.14	12441.83	PV	<100	LOW
140	Sand Point Area	05.10	4807.54	12443.81	PV	<100	LOW
141	Sand Point Area	05.10	4807.55	12442.79	PV	100-500	LOW
142	E of White Rock	05.11	4808.39	12443.16	PV	<100	LOW
143	E of White Rock	05.11	4808.22	12443.07	PV	<100	LOW
144	Cape Alava Area	05.12	4809.86	12444.19	PV	100-500	LOW
145	Cape Alava Area	05.12	4809.52	12444.74	PV	100-500	LOW
146	Bodelteh Island Area	05.13	4810.55	12445.20	ZC,PV,EJ	100-500	LOW
147	Bodelteh Island Area	05.13	4810.52	12445.49	ZC,PV,EJ	100-500	LOW
148	W Bodelteh Island Area	05.13	4810.67	12445.89	EJ,ZC	100-500	ALL
149	Ozette Island Area	05.14	4809.32	12443.85	PV	100-500	LOW
150	Ozette Island Area	05.14	4809.24	12444.71	PV	<100	LOW
151	Umatilla Reef	05.15	4811.10	12447.02	EJ,ZC	100-500	LOW
152	N of Cape Alava	05.16	4810.91	12444.43	EJ,ZC	100-500	ALL
153	S of Point of Arches	05.17	4814.17	12442.17	PV	<100	LOW
154	S of Point of Arches	05.17	4814.54	12442.39	PV	<100	LOW
155	S of Point of Arches	05.17	4814.42	12442.35	PV	<100	LOW
156	S of Point of Arches	05.17	4814.04	12442.28	PV	<100	LOW
157	Point of Arches	05.18	4814.92	12442.11	PV	<100	LOW
158	Portage Head Area	05.19	4816.76	12440.97	PV	<100	LOW
159	Waatch Point	05.20	4820.39	12441.56	PV	<100	LOW
160	S of Fuca Pillar/Skagway	05.21	4822.22	12443.68	PV,EJ	<100	LOW
161	Tatoosh Island Area	05.22	4823.53	12444.34	PV,EJ,ZC	<100	LOW
162	Tatoosh Island Area	05.22	4823.57	12444.57	EJ,ZC	100-500	ALL
163	E Tatoosh Island Area	05.22	4823.51	12443.83	EJ,ZC	<100	ALL
164	Allen's Bay/Midway Area	05.23	4803.69	12441.69	PV	100-500	LOW
165	Allen's Bay/Midway Area	05.23	4803.25	12441.51	PV	100-500	LOW
166	N Yellow Banks	05.24	4806.16	12441.63	PV	<100	LOW
167	Duk Point Area	05.25	4812.23	12442.08	PV	<100	LOW
168	Father and Son Area	05.26	4813.57	12442.70	PV	<100	LOW
169	Inshore of Father and Son	05.27	4813.64	12441.92	PV	<100	LOW

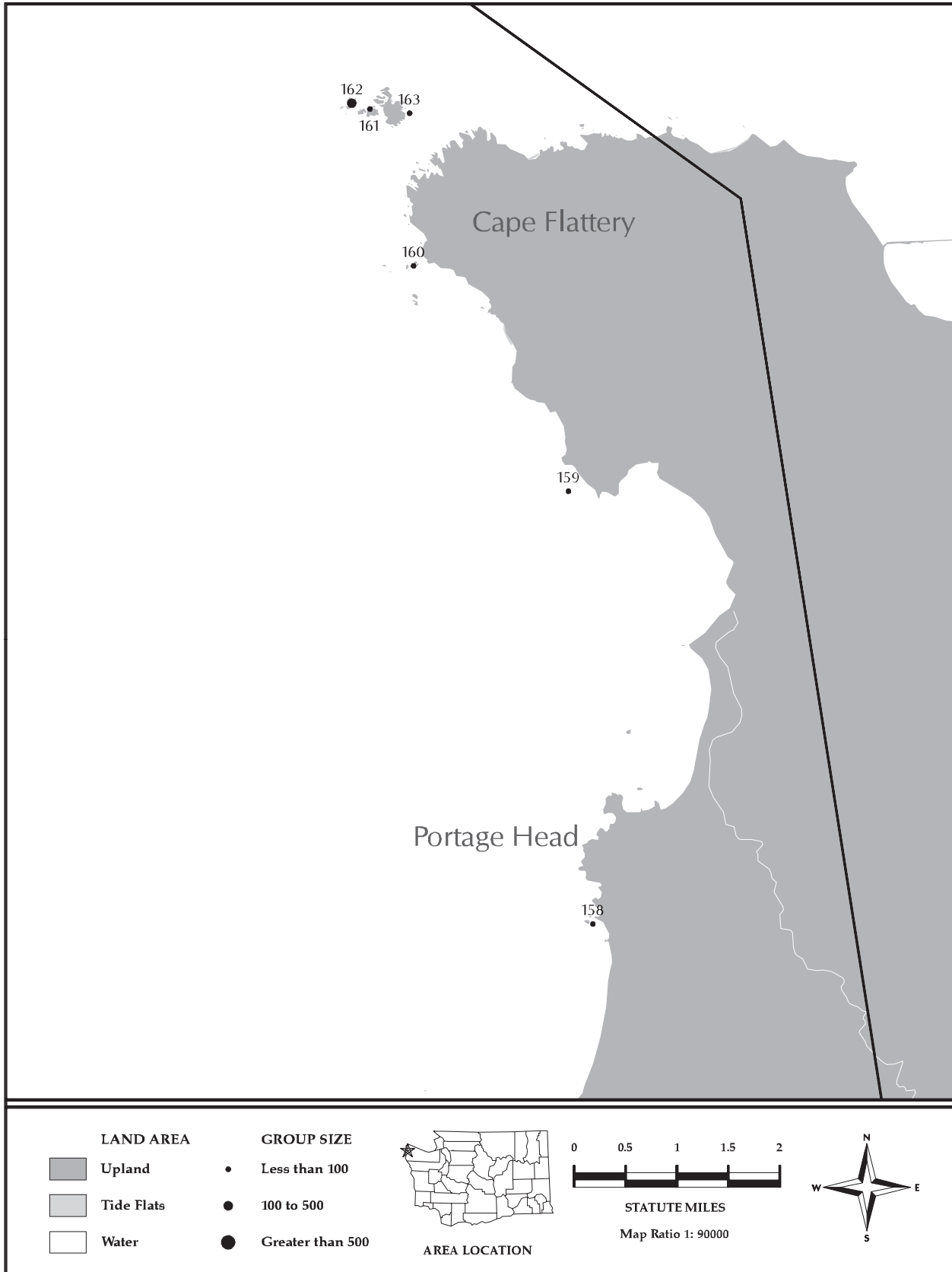


Region 5: Olympic Coast-North

<u>ID</u>	<u>Description</u>
127	Intertidal rocks and reefs south of Cape Johnson.
128	Intertidal reefs around point south of Cape Johnson.
129	Intertidal reefs in bay south of Cape Johnson (Chilean Memorial).
130	Intertidal reef complex off Cape Johnson.
131	Intertidal reef complex around Sandy Island (USFWS ID 275).
132	Intertidal area off point northeast of Sandy Island.
133	On inshore ledges of Sea Lion Rock (USFWS ID 271 and 272) area.
134	On ledges and tunnel areas around entire island.
135	On intertidal reef areas east of Bald Island (Jagged Islet).
136	Reef areas south of Cedar Creek.
137	Reef areas off stack just north of Cedar Creek.
138	Reef areas north of Cedar Creek off Norwegian Memorial.
139	Reef areas just south of Yellow Banks.
140	Reef complex offshore from Sand Point.
141	Reef complex around Sand Point.
142	Reef complex inshore from White Rock.
143	Reef complex inshore from White Rock.
144	Reef complex around Cape Alava.
145	Reef complex inshore from Ozette Island.
146	Reef areas on northeast side of island.
147	Reef areas on south side of island.
148	Rocks and reef areas off west end of island.
149	Reef areas southeast of Ozette Island.
150	Intertidal areas on south side of island.
151	Intertidal reef areas at Umatilla Reef.
152	Unnamed rock (USFWS ID 158) northwest from Cape Alava.
153	Reef areas south of Point of Arches.
154	Reef areas south of Point of Arches.
155	Reef areas south of Point of Arches.
156	Inshore ledges on 'Cooke Rock' (USFWS ID 119).
157	Intertidal reef areas on south side of Point of Arches.
158	Reef areas off 'shipwreck' beach.
159	Rocks and reef areas off Waatch Point.
160	Rocks and reef areas around Skagway Rocks and Fuca Pillar.
161	Intertidal rocks off west side of island.
162	Intertidal rocks and reef areas off west side of island.
163	Intertidal rocks on east side of island.
164	Reef areas along midway beach (off Allen's Bay in Lake Ozette).
165	Reef areas off south end of Lake Ozette.
166	Reef area at point north of Yellow Banks.
167	On scattered rocks and reef areas off Duk Point.
168	Intertidal ledges on inshore side of Father and Son Rocks.
169	Reef areas inshore from Father and Son Rocks.

Olympic Coast-North

Map 5A: Cape Flattery to Portage Head



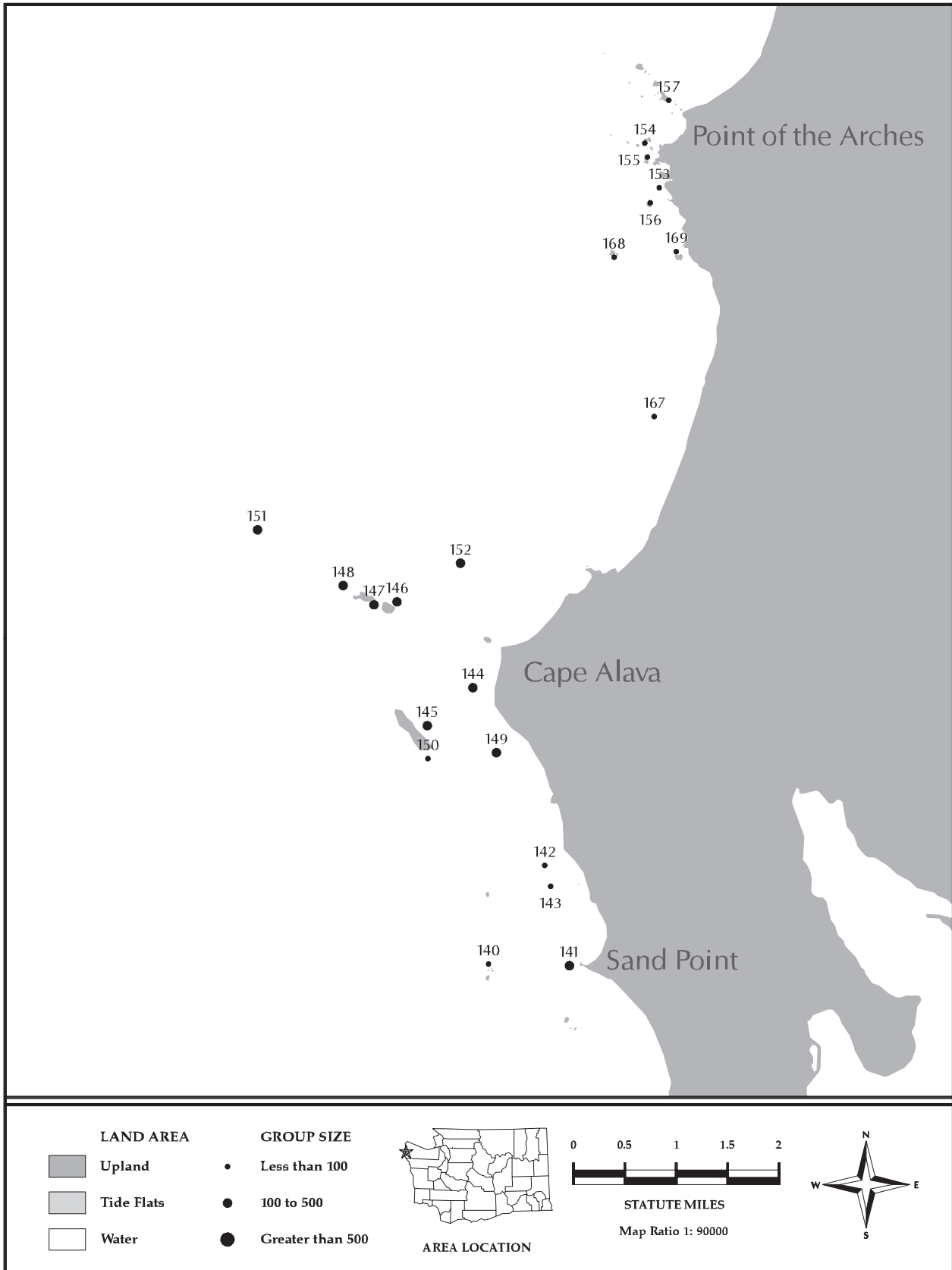
Olympic Coast-North

Map 5A: Cape Flattery to Portage Head

ID	<u>Location</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Species</u>	<u>Description</u>
158	Portage Head	48 16.76	124 40.97	PV	Reef areas off 'shipwreck' beach.
159	Waatch Point	48 20.39	124 41.56	PV	Rocks and reef areas off Waatch Point.
160	Fuca Pillar/Skagway	48 22.22	124 43.68	PV,EJ	Areas around Skagway Rocks and Fuca Pillar.
161	Tatoosh Island	48 23.53	124 44.34	PV,EJ,ZC	Intertidal rocks off west side of island.
162	W Tatoosh Island	48 23.57	124 44.57	PV,EJ,ZC	Rocks and reef areas off west side of island.
163	E Tatoosh Island	48 23.51	124 43.83	EJ,ZC	Rocks and reefs on east side of island.

Olympic Coast-North

Map 5B: Point of Arches to Sand Point



Olympic Coast-North
Map 5B: Point of Arches to Sand Point

ID	Location	Latitude	Longitude	Species	Description
140	Sand Point Area	4807.54	12443.81	PV	Reef complex offshore from Sand Point.
141	Sand Point Area	4807.55	12442.79	PV	Reef complex around Sand Point.
142	E of White Rock	4808.39	12443.16	PV	Reef complex inshore from White Rock.
143	E of White Rock	4808.22	12443.07	PV	Reef complex inshore from White Rock.
144	Cape Alava Area	4809.86	12444.19	PV	Reef complex around Cape Alava.
145	Cape Alava Area	4809.52	12444.74	PV	Reef complex inshore from Ozette Island.
146	Bodelteh Island Area	48 10.55	12445.20	PV	Reef areas on notheast side of island.
147	Bodelteh Island Area	48 10.52	12445.49	PV	Reef areas on south side of island.
148	W Bodelteh Island Area	48 10.67	12445.89	EJ,ZC	Rocks and reef areas off west end of island.
149	Ozette Island Area	4809.32	12443.85	PV	Reef areas southeast of Ozette Island.
150	Ozette Island Area	4809.24	12444.71	PV	Intertidal areas on south side of island.
151	Umatilla Reef	48 11.10	12447.02	EJ,ZC	Intertidal reef areas at Umatilla Reef.
152	NW of Cape Alava	48 10.91	12444.43	EJ,ZC	Unnamed rock (USFWS ID 158) northwest from Cape Alava.
153	S of Point of Arches	48 14.17	12242.17	PV	Reef areas south of Point of Arches.
154	S of Point of Arches	48 14.54	12242.39	PV	Reef areas south of Point of Arches.
155	S of Point of Arches	48 14.42	12242.35	PV	Reef areas south of Point of Arches.
156	S of Point of Arches	48 14.04	12442.28	PV	Inshore ledges on “Cooke Rock” (USFWS ID 119).
157	Point of Arches	48 14.92	12442.11	PV	Intertidal reef areas on south side of Point of Arches.
167	Duk Point Area	48 12.23	12442.08	PV	On scattered rocks and reef areas off Duk Point.
168	Father and Son Area	48 13.57	12442.70	PV	Intertidal ledges on inshore side of Father and Son Rocks.
169	Inshore of Father and Son	48 13.64	12441.92	PV	Reef areas inshore from Father and Son Rocks.

Olympic Coast-North

Map 5C: Lake Ozette to Rialto Beach



Olympic Coast-North

Map 5C: Lake Ozette to Rialto Beach

ID	Location	Latitude	Longitude	Species	Description
127	S of Cape Johnson	4857.16	12440.25	PV	Intertidal rocks and reefs south of Cape Johnson.
128	S of Cape Johnson	4857.40	12440.30	PV	Intertidal reefs around point south of Cape Johnson.
129	S of Cape Johnson	4857.65	12439.95	PV	Intertidal reefs in bay south of Cape Johnson (Chilean Memorial).
130	N of Cape Johnson	4858.51	12441.03	PV	Intertidal reef complex off Cape Johnson.
131	Sandy Island	4859.21	12441.24	PV	Intertidal reef complex around Sandy Island (USFWS ID 275).
132	Reef NE of Sandy Island	4859.48	12440.82	PV	Intertidal reef complex off point northeast of Sandy Island.
133	Sea Lion Rock	4859.59	12443.45	PV	On inshore ledges of Sea Lion Rock (USFWS ID 271 and 272) area.
134	Carroll Island	4800.34	12443.33	PV	On ledges and tunnel areas around entire island.
135	E of Jagged Island	4859.78	12441.48	PV	On intertidal reef areas east of Bald Island (Jagged Islet).
136	S Cedar Creek Area	4801.22	12441.11	PV	Reef areas south of Cedar Creek.
137	N Cedar Creek Area	4801.78	12441.19	PV	Reef areas off stack just north of Cedar Creek.
138	Norwegian Memorial Area	4801.52	12441.04	PV	Reef areas north of Cedar Creek off Norwegian Memorial.
139	S Yellow Banks	4805.14	12241.83	PV	Reef areas at point south of Yellow Banks.
164	Allen's Bay/Midway Area	4803.69	12441.69	PV	Reef areas along midway beach (off Allen's Bay in Lake Ozette).
165	Allen's Bay/Midway Area	4803.25	12441.51	PV	Reef areas off south end of Lake Ozette.
166	N Yellow Banks	4806.16	12441.63	PV	Reef areas at point north of Yellow Banks.

Region 6: Strait of Juan de Fuca-West

Use NOAA Charts 18460 (Strait of Juan de Fuca Entrance) and 18465 (Strait of Juan de Fuca-eastern part) for navigation and bathymetry details.

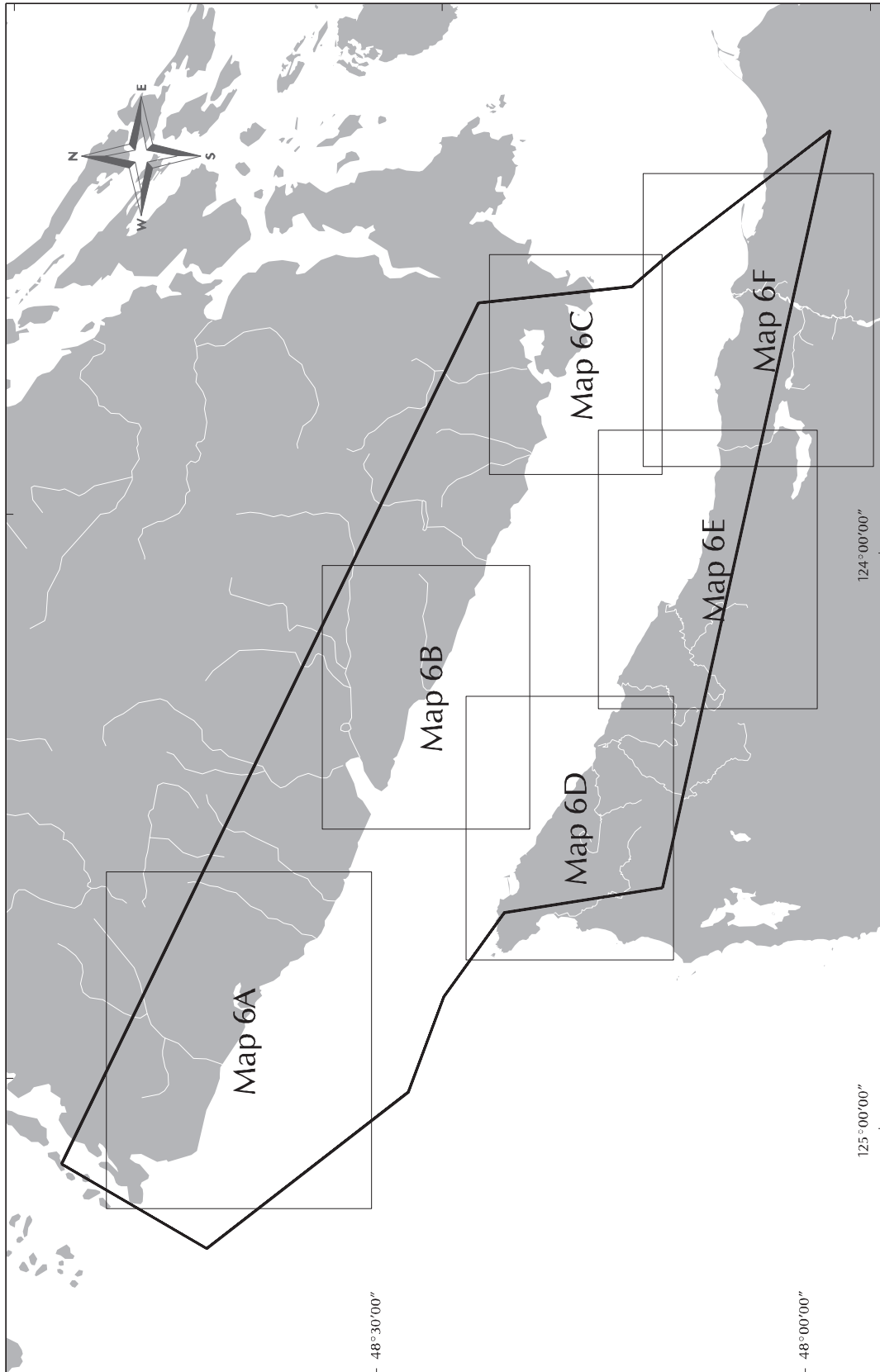
Scattered harbor seal haulout sites are located on intertidal rocks, reefs, and ledges along the Strait of Juan de Fuca and Vancouver Island. Peak harbor seal abundances occur during pupping (mid-June through August) and annual molt (late August through October). Steller sea lion haulout sites are near Carmanah and Sombrio Point on Vancouver Island. California sea lion haulout sites are located at Waadah Island and Sombrio Point.



Steller sea lions on offshore rock near Carmanah, British Columbia, May 19, 1997.



Strait of Juan de Fuca-West Region 6



Region 6: Strait of Juan de Fuca-West

<u>ID</u>	<u>Location</u>	<u>Survey Code</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Species</u>	<u>Count</u>	<u>Use</u>
170	Waadah Island	6.01	4822.93	12435.50	PV	<100	LOW
171	N Waadah Island	6.01	4823.15	12435.98	ZC	<100	ALL
172	Seal and Sail Rock Area	6.02	4821.71	12432.74	PV	<100	LOW
173	Seal and Sail Rock Area	6.02	4821.55	12432.63	PV	<100	LOW
174	Seal and Sail Rock Area	6.02	4821.16	12431.90	PV	<100	LOW
175	W of Seiku River Mouth	6.03	4818.07	12424.76	PV	<100	LOW
176	W of Seiku River Mouth	6.03	4818.30	12425.18	PV	<100	LOW
177	Eagle Point Area	6.04	4816.75	12420.44	PV	<100	LOW
178	Eagle Point Area	6.04	4816.58	12419.97	PV	<100	LOW
179	Eagle Point Area	6.04	4816.48	12419.48	PV	<100	LOW
180	Ship Point Area	6.05	4815.73	12414.03	PV	<100	LOW
181	Ship Point Area	6.05	4815.44	12413.43	PV	<100	LOW
182	Ship Point Area	6.05	4815.03	12412.37	PV	<100	LOW
183	W of Pillar Point Area	6.06	4813.30	12407.06	PV	<100	LOW
184	W of Pillar Point Area	6.06	4813.07	12406.05	PV	<100	LOW
185	W of Pillar Point Area	6.06	4813.64	12408.26	PV	<100	LOW
186	Deep Creek Area	6.07	4810.70	12402.57	PV	<100	LOW
187	Deep Creek Area	6.07	4810.56	12401.48	PV	<100	LOW
188	Deep Creek Area	6.07	4810.39	12400.24	PV	<100	LOW
189	Low Point/Lyre River Area	6.08	4809.62	12349.88	PV	<100	LOW
190	Crescent Bay/Tongue Point	6.09	4810.07	12342.50	PV	<100	LOW
191	Striped Peak Area	6.10	4809.85	12340.80	PV	<100	LOW
192	Striped Peak Area	6.10	4809.85	12341.33	PV	<100	LOW
193	Striped Peak Area	6.10	4809.73	12340.03	PV	<100	LOW
194	Striped Peak Area	6.10	4809.60	12339.65	PV	<100	LOW
195	Port Angeles Area	6.11	4807.07	12324.67	PV	<100	LOW
196	Port Angeles Area	6.12	4808.21	12327.46	PV	<100	LOW
197	Rocks E of Pysht River	6.13	4811.86	12305.25	PV	<100	LOW
198	Twin River Area	6.14	4809.76	12355.06	PV	<100	LOW
199	Twin River Area	6.14	4809.82	12352.69	PV	<100	LOW
200	Seabird Rocks	6.15	4844.91	12509.32	PV	<100	LOW
201	Sombrio Point Reef	6.16	4829.72	12317.99	PV	<100	LOW
202	Sombrio Point	6.16	4829.11	12317.25	PV,ZC	<100	LOW
203	Rock W of Carmanah Point	6.17	4836.96	12345.62	EJ	100-500	LOW
204	Dare Point Reef	6.18	4838.64	12348.11	PV	<100	LOW
205	Sooke Harbor	6.19	4821.32	12343.43	PV	<100	LOW
206	Sooke Harbor	6.19	4822.26	12342.90	PV	<100	LOW
207	Otter Point	6.21	4821.48	12349.43	PV	<100	LOW
208	NW of Church Point	6.22	4818.79	12335.40	PV	<100	LOW
209	Becher Bay	6.23	4819.68	12336.55	PV	<100	LOW
210	Muir Point	6.24	4822.75	12352.25	PV	<100	LOW
211	E San Simon Point	6.25	4826.02	12305.48	PV	<100	LOW
212	Owen Point	6.26	4832.68	12329.99	PV	<100	LOW
213	W Tsuquanah Point	6.27	4840.40	12352.91	PV	<100	LOW
214	Pachena Point	6.28	4843.21	12504.81	PV,EJ	<100	LOW
215	E of Cape Beale	6.29	4847.03	12510.51	PV	<100	LOW
216	Cullite Cove	6.30	4834.12	12437.10	PV	<100	LOW
217	Walbran Creek	6.31	4834.81	12439.91	PV	<100	LOW
218	Cerrantes Rocks	6.32	4831.67	12427.17	PV	<100	LOW



Region 6: Strait of Juan de Fuca-West

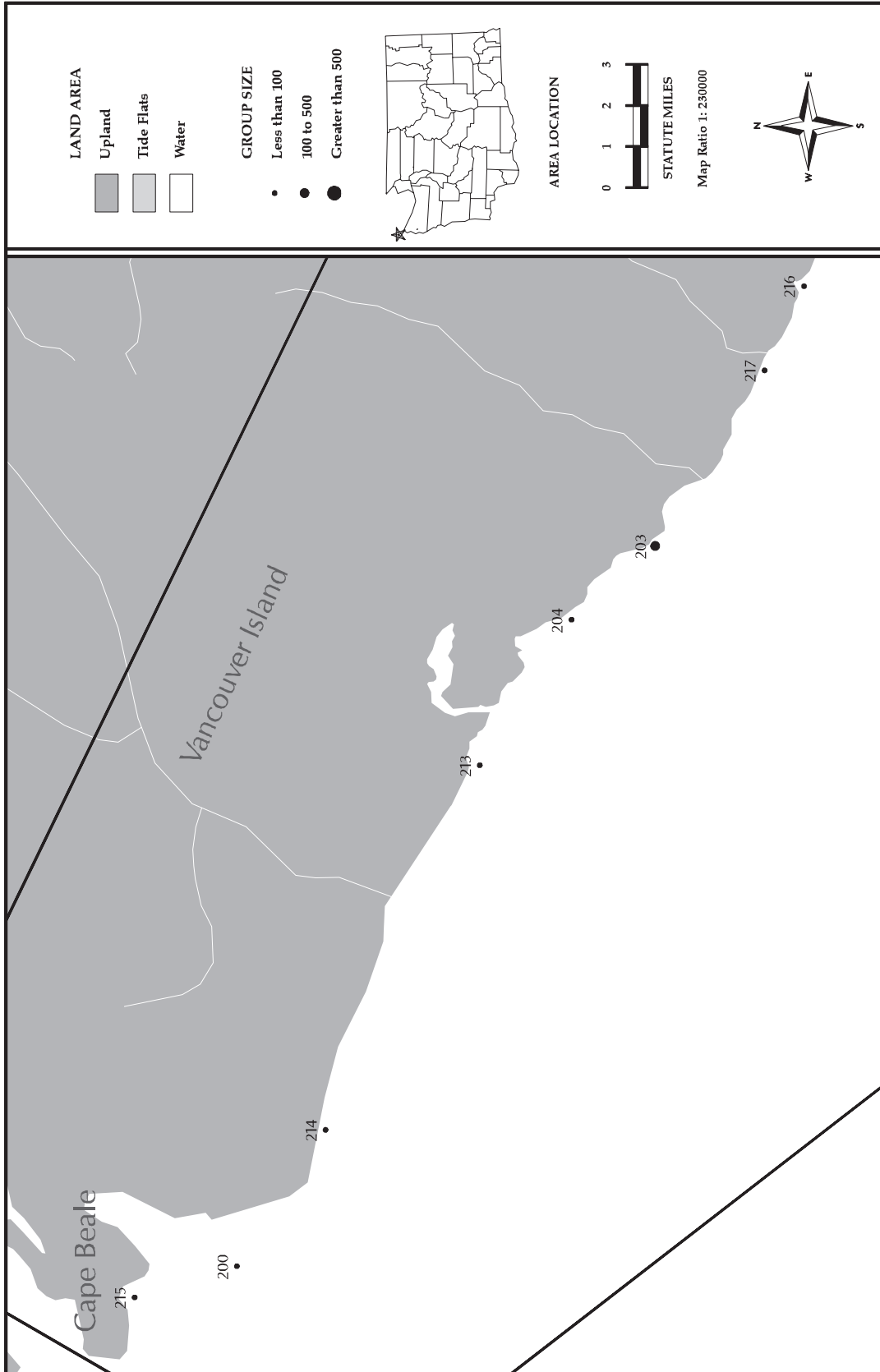
ID Description

- 170 Reef area on east side of Waadah Island.
- 171 On north tip of island.
- 172 Intertidal areas on Seal Rock.
- 173 Intertidal areas on Sail Rock.
- 174 Intertidal reef areas of Sail Rock.
- 175 Intertidal reef areas west of Sekiu River.
- 176 Intertidal reef areas west of Sekiu River.
- 177 Intertidal ledges east of Eagle Point.
- 178 Intertidal ledges east of Eagle Point.
- 179 Intertidal ledges east of Eagle Point.
- 180 Intertidal ledges east of Slip Point.
- 181 Intertidal ledges east of Slip Point.
- 182 Intertidal ledges east of Slip Point.
- 183 Intertidal ledges west of Pillar Point.
- 184 Intertidal ledges west of Pillar Point.
- 185 Intertidal ledges west of Pillar Point.
- 186 Reef areas off Deep Creek.
- 187 Reef areas off Deep Creek.
- 188 Reef areas off Deep Creek.
- 189 Scattered rocks and reef areas east of Lyre River.
- 190 Intertidal areas of Tongue Point.
- 191 Intertidal ledges north of Striped Peak.
- 192 Intertidal ledges north of Striped Peak.
- 193 Intertidal ledges north of Striped Peak.
- 194 Intertidal ledges north of Striped Peak.
- 195 Log booms off the ITT-Rayonier mill site (mill closed in 1997)
- 196 Log booms on inside of Ediz Hook in Port Angeles harbor.
- 197 Scattered intertidal rocks and reef areas east of the Pysht River.
- 198 Scattered intertidal rocks and reef areas near Twin Rivers.
- 199 Scattered intertidal rocks and reef areas near Twin Rivers.
- 200 Intertidal rocks and reef areas around Seabird Rocks.
- 201 Intertidal rocks and reef areas around Sombrio Point.
- 202 Intertidal ledges near Sombrio Point.
- 203 Rock W of Carmanah Point.
- 204 Reef area off Dare Point.
- 205 Sooke Harbor area.
- 206 Intertidal area off Sooke Harbor.
- 207 Intertidal rocks and reef areas off Otter Point.
- 208 Intertidal rocks and reef areas off Church Point.
- 209 Intertidal rocks and reef areas around small island in Becher Bay.
- 210 Intertidal rocks and reef areas off Muir Point.
- 211 Intertidal ledges and rocks east of San Simon Point.
- 212 Intertidal ledges and rocks off Owen Point.
- 213 Intertidal rocks and reef areas west of Tsuquanah Point.
- 214 Intertidal rocks and reef areas around Pachena Point.
- 215 Intertidal rocks and reef areas east of Cape Beale.
- 216 Intertidal rocks and reef areas off Cullite Cove.
- 217 Intertidal rocks and reef areas off Walbran Creek.
- 218 Intertidal ledges and reef areas at Cerantes Rocks.



Strait of Juan de Fuca-West

Map 6A: Cape Beale to Cullite Cove



Strait of Juan de Fuca-West
Map 6A: Cape Beale to Cullite Cove

ID	Location	Latitude	Longitude	Species	Description
200	Seabird Rock	4844.91	125 09.32	PV	Intertidal rocks and reef areas around Seabird Rocks.
203	W of Carmanah Point	4836.96	124 45.62	EJ	Offshore rock W of Carmanah Point.
204	Dare Point Reef	4838.64	124 48.11	PV	Reef area off Dare Point.
213	W Tsuquanah Point	4840.40	124 52.91	PV	Intertidal rocks and reef areas west of Tsuquanah Island.
214	Pachena Point	4843.21	125 04.81	PV,EJ	Intertidal rocks and reef areas around Pachena Point.
215	E of Cape Beale	4747.03	125 10.51	PV	Intertidal rocks and reef areas east of Cape Beale.
216	Cullite Cove	4834.12	124 37.10	PV	Intertidal rocks and reef areas off Cullite Cove.
217	Walbran Creek	4734.81	124 39.91	PV	Intertidal rocks and reef areas off Walbran Creek.

Strait of Juan de Fuca-West

Map 6B: Port San Juan to San Simon Point



Strait of Juan de Fuca-West
Map 6B: Port San Juan to San Simon Point

ID	<u>Location</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Species</u>	<u>Description</u>
201	Sombrio Point Reef	4829.72	12417.99	PV	Intertidal rocks and reef areas around Sombrio Point.
202	Sombrio Point	4829.11	12417.25	PV,ZC	Intertidal ledges near Sombrio Point.
211	E San Simon Point	4826.02	12405.48	PV	Intertidal ledges and rock east of San Simon Point.
212	Owen Point	4832.68	12429.99	PV	Intertidal ledges and rocks off Owen Point.
218	Cerrantes Rocks	4831.67	12427.17	PV	Intertidal ledges and reef areas at Cerrantes Rocks.

Strait of Juan de Fuca-West

Map 6C: Muir Point to Church Point

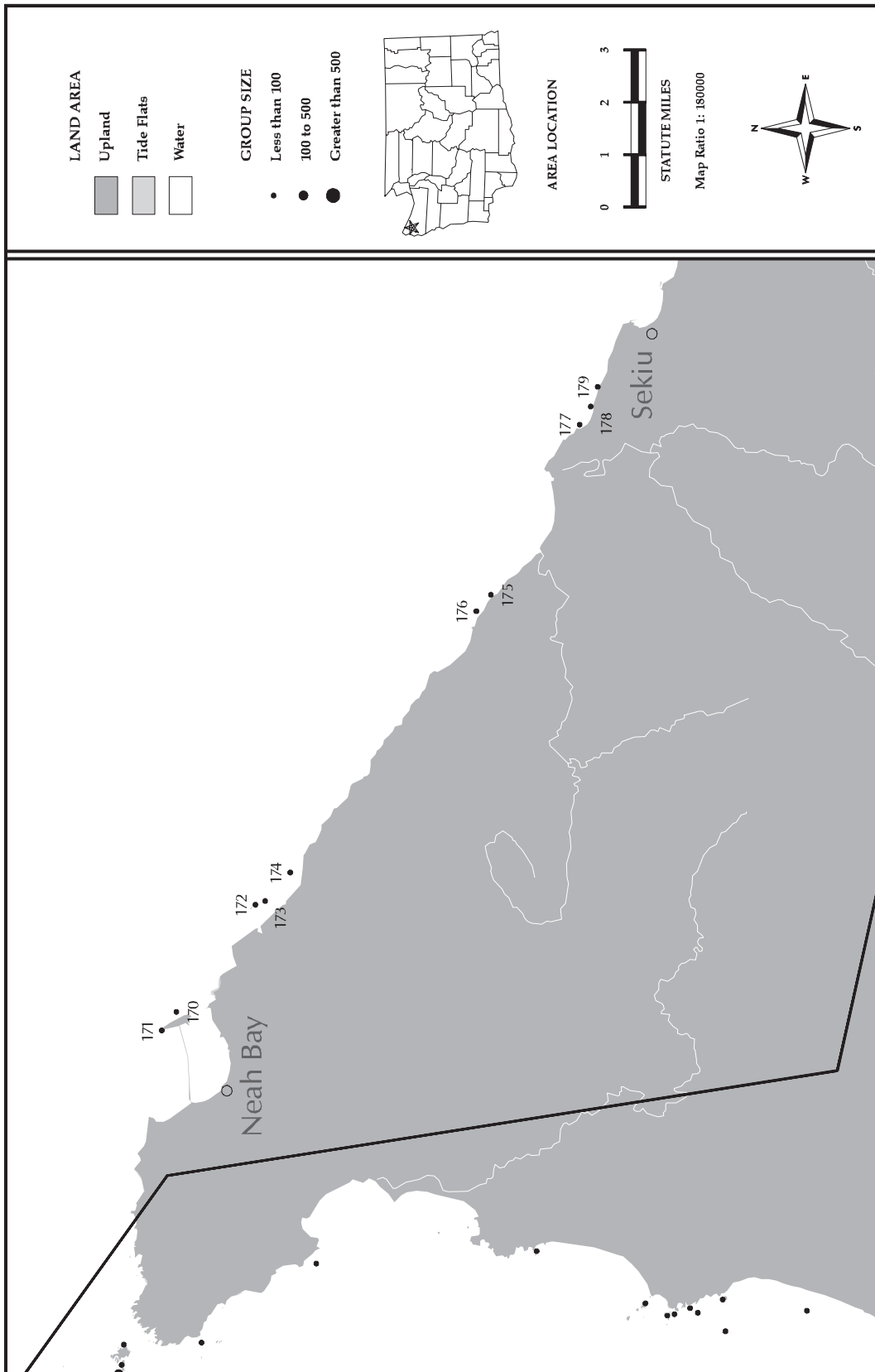


Strait of Juan de Fuca-West
Map 6C: Muir Point to Church Point

ID	<u>Location</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Species</u>	<u>Description</u>
205	Sooke Harbor	48 21.32	123 43.43	PV	Sooke Harbor area.
206	Sooke Harbor	48 22.26	123 42.90	PV	Intertidal area off Sooke Harbor.
207	Otter Point	48 21.48	123 49.43	PV	Intertidal rocks and reef areas off Otter Point.
208	NW of Church Point	48 18.79	123 35.40	PV	Intertidal rocks and reef areas off Church Point.
209	Becher Bay	48 19.68	123 36.55	PV	Intertidal areas on small island in Becher Bay.
210	Muir Point	48 22.75	123 52.25	PV	Intertidal rocks and reef areas off Muir Point.

Strait of Juan de Fuca-West

Map 6D: Neah Bay to Sekiu

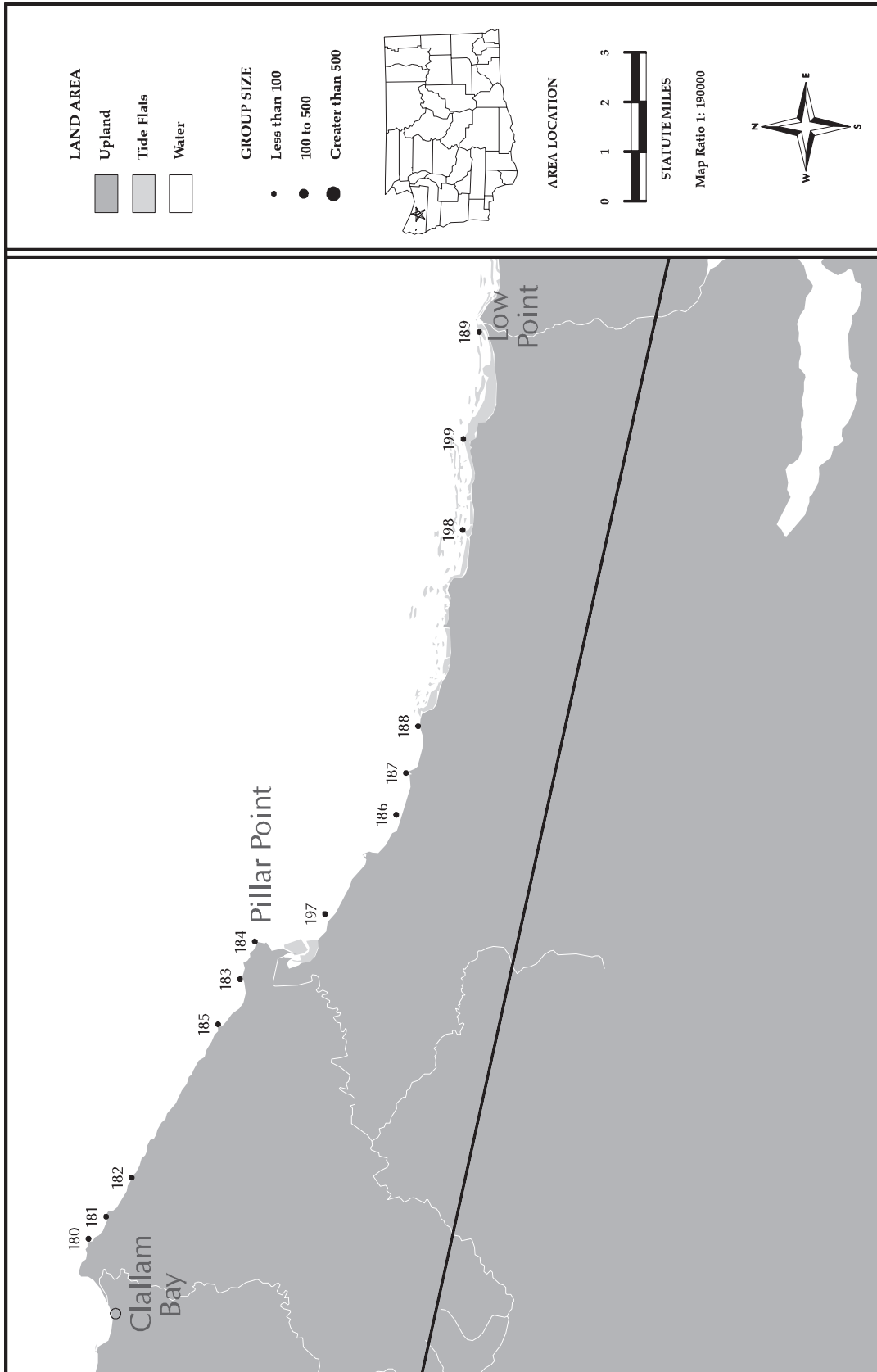


Strait of Juan de Fuca-West
Map 6D: Neah Bay to Sekiu

ID	Location	Latitude	Longitude	Species	Description
170	Waadah Island	4822.93	12435.50	PV	Reef area on east side of Waadah Island.
171	N Waadah Island	4823.15	12435.98	ZC	On north tip of island.
172	Seal and Sail Rock Area	4821.71	12432.74	PV	Intertidal areas on Seal Rock.
173	Seal and Sail Rock Area	4821.55	12432.63	PV	Intertidal areas on Sail Rock.
174	Seal and Sail Rock Area	4821.16	12431.90	PV	Intertidal reef areas east of Sail Rock.
175	W of Seiku River Mouth	4818.07	12424.76	PV	Intertidal reef areas west of Sekiu River.
176	W of Seiku River Mouth	4818.30	12425.18	PV	Intertidal reef areas west of Sekiu River.
177	Eagle Point Area	4816.75	12420.44	PV	Intertidal ledges east of Eagle Point.
178	Eagle Point Area	4816.58	12419.97	PV	Intertidal ledges east of Eagle Point.
179	Eagle Point Area	4816.48	12419.48	PV	Intertidal ledges east of Eagle Point.

Strait of Juan de Fuca-West

Map 6E: Clallam Bay to Low Point

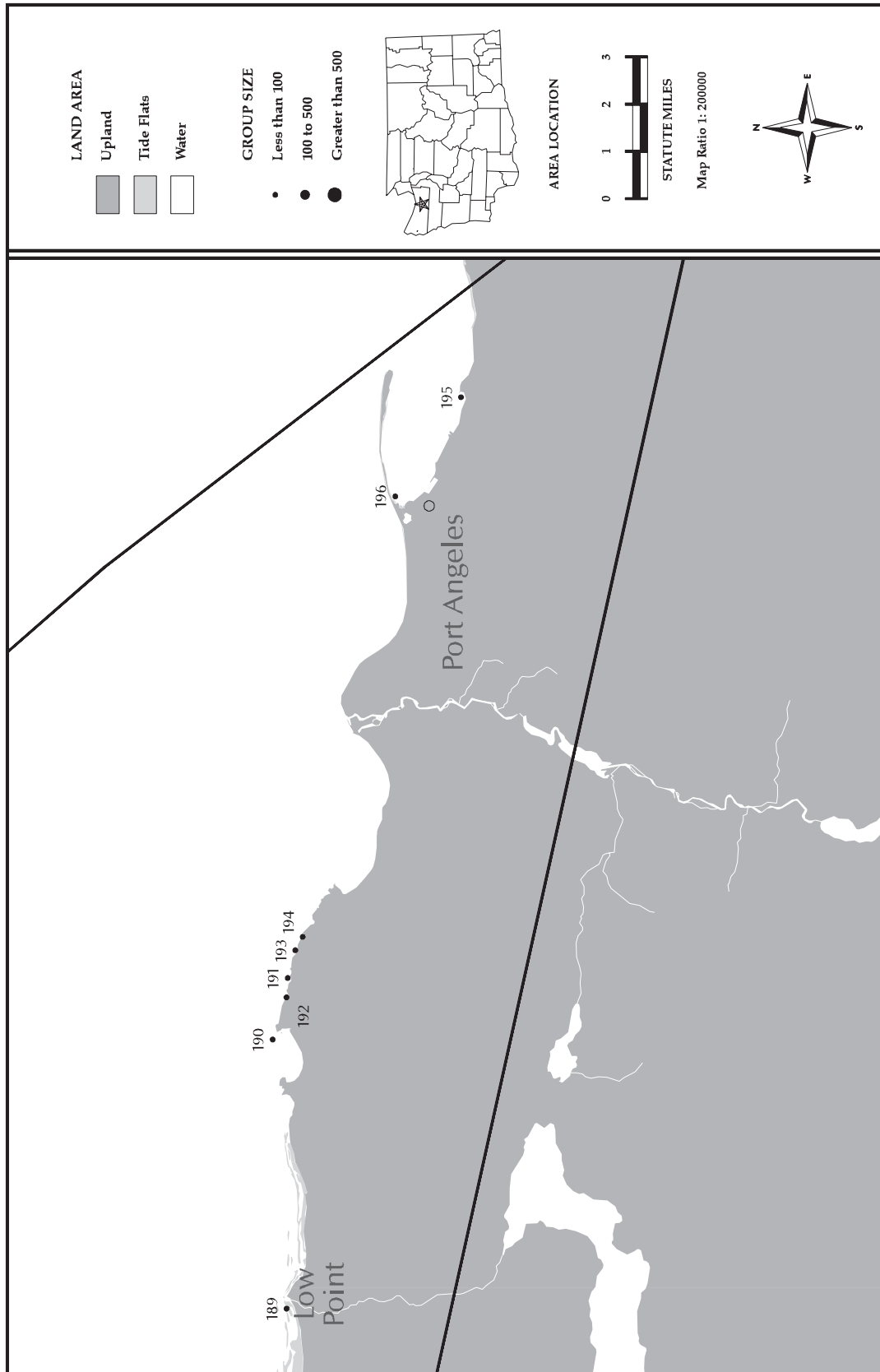


Strait of Juan de Fuca-West
Map 6E: Clallam Bay to Low Point

ID	Location	Latitude	Longitude	Species	Description
180	Slip Point Area	48 15.73	124 14.03	PV	Intertidal ledges east of Slip Point.
181	Slip Point Area	48 15.44	124 13.43	PV	Intertidal ledges east of Slip Point.
182	Slip Point Area	48 15.03	124 12.37	PV	Intertidal ledges east of Slip Point.
183	W of Pillar Point Area	48 13.30	124 07.06	PV	Intertidal ledges west of Pillar Point.
184	W of Pillar Point Area	48 13.07	124 06.05	PV	Intertidal ledges west of Pillar Point.
185	W of Pillar Point Area	48 13.64	124 08.26	PV	Intertidal ledges west of Pillar Point.
186	Deep Creek Area	48 10.70	124 02.57	PV	Reef areas off Deep Creek.
187	Deep Creek Area	48 10.56	124 01.48	PV	Reef areas off Deep Creek.
188	Deep Creek Area	48 10.39	124 00.24	PV	Reef areas off Deep Creek.
189	Low Point/Lyre River Area	48 09.62	124 49.88	PV	Scattered rocks and reef areas east of Lyre River.
197	Rocks E of Pysht River	48 11.86	124 05.25	PV	Scattered intertidal rocks and reef areas east of the Pysht River.
198	Twin River Area	48 09.76	123 55.06	PV	Scattered intertidal rocks and reef areas near Twin Rivers.
199	Twin River Area	48 09.82	123 52.69	PV	Scattered intertidal rocks and reef areas near Twin Rivers.

Strait of Juan de Fuca-West

Map 6F: Low Point to Port Angeles



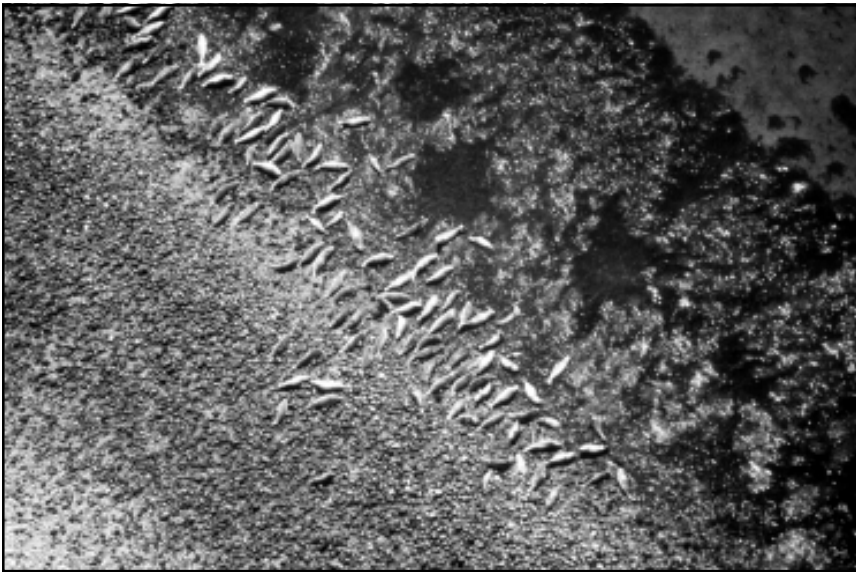
Strait of Juan de Fuca-West
Map 6F: Low Point to Port Angeles

ID	Location	Latitude	Longitude	Species	Description
189	Low Point/Lyre River Area	4809.62	12349.88	PV	Scattered rocks and reef areas east of Lyre River.
190	Crescent Bay/Tongue Point	4810.07	12342.50	PV	Intertidal areas off Tongue Point.
191	Striped Peak Area	4809.85	12340.80	PV	Intertidal ledges north of Striped Peak.
192	Striped Peak Area	4809.85	12341.33	PV	Intertidal ledges north of Striped Peak.
193	Striped Peak Area	4809.73	12340.03	PV	Intertidal ledges north of Striped Peak.
194	Striped Peak Area	4809.60	12339.65	PV	Intertidal ledges north of Striped Peak.
195	Port Angeles Area	4807.07	12324.67	PV	Log booms off the ITT-Rayonier mill site (mill closed in 1997).
196	Port Angeles Area	4808.21	12327.46	PV	Log booms on inside of Ediz Hook in Port Angeles harbor.

Region 7: Strait of Juan de Fuca-East

Use NOAA Charts 18465 (Strait of Juan de Fuca-eastern part) and 18440 (Puget Sound) for navigation and bathymetry details.

Scattered harbor seal haulout sites are located on intertidal rocks, reefs and islands in this region. Large harbor seal haulout sites are found at Dungeness Spit, Protection Island and Smith/Minor Islands. A small number of elephant seals may also be found at these same locations as well. Elephant seal pups have recently been recorded at Protection and Minor Islands. For harbor seals, peak counts occur during the pupping season (mid-June through August) and annual molt (late July through September). With the exception of occasional use of navigation bouys, no sea lion haulout sites are known in this region.



Harbor seals hauled out on cobble beach on south side of Minor Island, August 2, 1993.

Strait of Juan de Fuca-East Region 7



Region 7: Strait of Juan de Fuca-East

<u>ID</u>	<u>Location</u>	<u>Survey Code</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Species</u>	<u>Count</u>	<u>Use</u>
219	Graveyard Spit	07.01	4809.65	12308.86	PV	100-500	LOW
220	Dungeness Spit End	07.02	4811.07	12305.98	PV,MA	100-500	LOW
221	Dungeness Bay Area	07.03	4810.05	12308.56	PV	<100	LOW
222	Dungeness Bay Area	07.03	4809.65	12309.34	PV	<100	LOW
223	Gray's Marsh (Kulakala Point)	07.04	4807.14	12303.59	PV	<100	LOW
224	Protection Island, Kanem Spit	07.05	4807.13	12256.70	PV,MA	100-500	LOW
225	Protection Island, Violet Spit	07.06	4807.63	12254.47	PV,MA	100-500	LOW
226	Smith Island Area	07.07	4819.08	12250.20	PV	<100	LOW
227	Smith Island Area	07.07	4819.21	12250.10	PV	100-500	LOW
228	Minor Island Area	07.08	4819.33	12249.37	PV	500>	LOW
229	Minor Island Area	07.08	4819.46	12248.97	PV,MA	<100	LOW
230	Kilisut Harbor Spit	07.09	4805.32	12243.99	PV	100-500	LOW
231	East of Marrowstone Island	07.10	4802.86	12240.72	PV	<100	LOW
232	East of Marrowstone Island	07.10	4804.69	12241.11	PV	<100	LOW
233	Sequim Bay, Kiapot Point	07.12	4804.74	12302.41	PV	<100	LOW
234	Discovery Bay Area	07.14	4802.87	12252.28	PV	<100	LOW
235	Klas and Colvos Rocks Area	08.01	4757.75	12240.24	PV	<100	LOW
236	Klas and Colvos Rocks Area	08.01	4756.96	12239.96	PV	100-500	LOW
253	Rocks off Tala Point	08.10	4755.61	12239.21	PV	<100	ALL



Region 7: Strait of Juan de Fuca-East

<u>ID</u>	<u>Description</u>
219	Beach areas around Graveyard Spit in Dungeness Bay. Nursery area.
220	On beach at tip of Dungeness Spit.
221	Along beach on east side of Dungeness Bay.
222	Along north side of main channel in Dungeness Bay.
223	Beach and intertidal sand bars near Gray's Marsh (Kulakala Point)
224	On beach and spit areas around Kanem Spit. Nursery area.
225	On beach area around Violet Spit. Nursery area.
226	On beaches and rocks on south side of Smith Island.
227	On scattered rocks along north side of Smith Island.
228	On cobble beach along south side of Minor Island. Nursery area.
229	On beach along north side of Minor Island. Nursery area.
230	Along beach and spit at entrance to Kilisut Harbor.
231	Scattered intertidal rocks along the northeast side of Marrowstone Island.
232	Scattered intertidal rocks along southeast side of Marrowstone Island.
233	West end of Kiapot Point at entrance to Sequim Bay.
234	Along beaches and spit on west side of Discovery Bay.
235	Intertidal reef and shoals around Klas Rock.
236	Intertidal shoals and rocks around Colvos Rocks.
253	Scattered intertidal rocks off Tala Point.

Strait of Juan de Fuca-East

Map 7A: Smith and Minor Islands

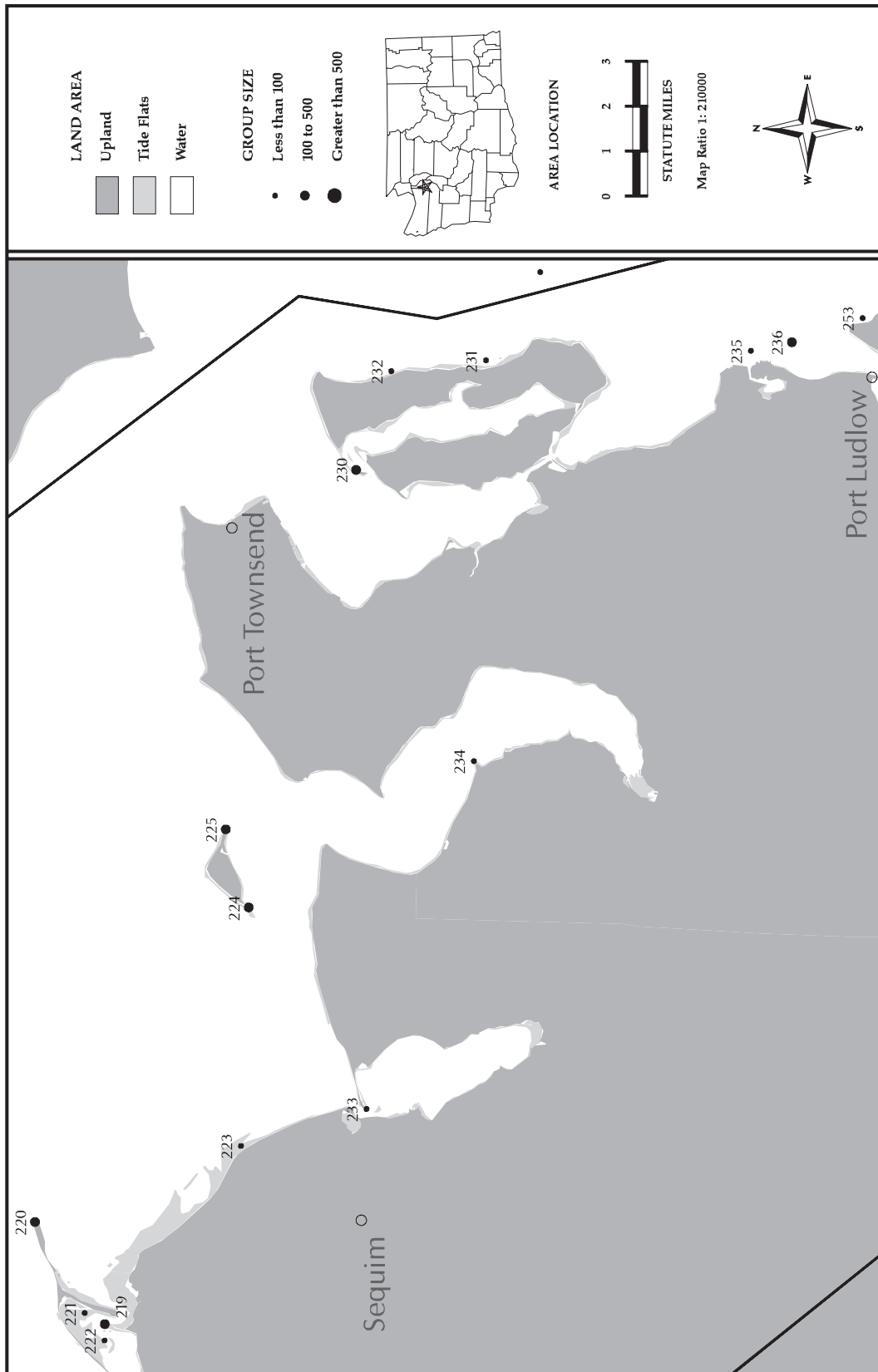


Strait of Juan de Fuca-East
Map 7A: Smith and Minor Islands

ID	<u>Location</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Species</u>	<u>Description</u>
226	Smith Island Area	48 19.08	122 50.20	PV	On beaches and rocks on south side of island.
227	Smith Island Area	48 19.21	122 50.10	PV	On scattered rocks along north side of island.
228	Minor Island Area	48 19.33	122 49.37	PV	On beach along south side of island. Nursery area.
229	Minor Island Area	48 19.46	122 48.97	PV,MA	On beach along north side of island. Nursery area.

Strait of Juan de Fuca-East

Map 7B: Dungeness Spit to Marrowstone Island



Strait of Juan de Fuca-East
Map 7B: Dungeness Spit to Marrowstone Island

ID	Location	Latitude	Longitude	Species	Description
219	Graveyard Spit	4809.65	12308.86	PV	Beach areas around Graveyard Spit in Dungeness Bay. Nursery area.
220	Dungeness Spit End	4811.07	12305.98	PV	On beach at tip of Dungeness Spit.
221	Dungeness Bay Area	4810.05	12308.56	PV	Along beach on east side of Dungeness Bay.
222	Dungeness Bay Area	4809.65	12309.34	PV	Along north side of main channel in Dungeness Bay.
223	Grays Marsh (Kulakala Pt)	4807.14	12303.59	PV	Beach and shoal areas near Gray's Marsh (Kulakala Point).
224	Protection Is, Kanem Spit	4807.13	12256.70	PV	On beach and spit areas around Kanem Point. Nursery area.
225	Protection Island, Violet Pt	4807.63	12254.47	PV,MA	On beach area around Violet Point. Nursery area.
230	Kilisut Harbor Spit	4805.32	12243.99	PV	Along beach and spit at entrance into Kilisut Harbor.
231	E of Marrowstone Island	4802.86	12240.72	PV	Scattered intertidal rocks along northeast side of island.
232	E of Marrowstone Island	4804.69	12241.11	PV	Scattered intertidal rocks along southeast side of island.
233	Sequim Bay, Kiapot Point	4804.74	12202.41	PV	West end of Kiapot Point at entrance to Sequim Bay.
234	Discovery Bay Area	4802.87	12252.28	PV	Along beaches and spit areas on west side of Discovery Bay.
235	Klas/Colvos Rocks	4857.75	12240.24	PV	Intertidal shoals around Klas Rock.
236	Klas/Colvos Rocks	4856.96	12239.96	PV	Intertidal shoals and rocks around Colvos Rock.
253	Rocks of Tala Point	4755.61	12239.21	PV	Scattered intertidal rocks off Tala Point.

Region 8: Hood Canal

Use NOAA Charts 18440 (Puget Sound), 18441 (Puget Sound-northern part) and 18448 (Puget Sound-southern part) for navigation and bathymetry details.

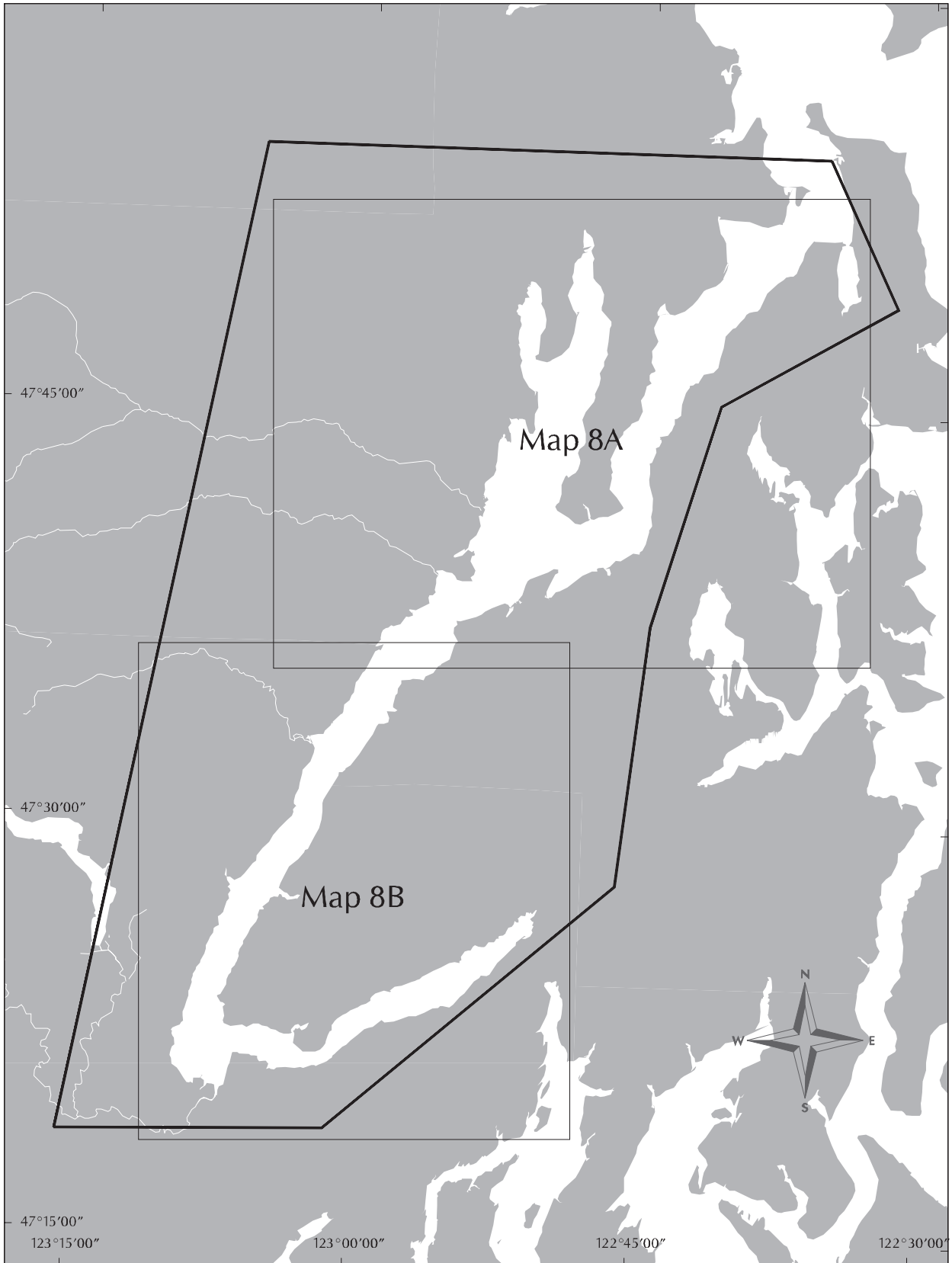
Primary harbor seal haulout sites are located at the mouths of the Dosewallips, Duckabush, Hamma Hamma and Skokomish rivers, and are generally used at high tide when increasing water levels provide access to areas along river channels and sloughs. Additional haulout sites are also present on intertidal tideflats, rocks and reefs. Logbooms and floats are also used as haulout sites in this region. Peak counts occur during the primary pupping season (late July through September) and annual molt (September through November). Newborn pups have been reported as late as December and January in this region. No sea lion haulout sites are located in this region, although California sea lions may be seen rafted off river mouths seasonally.



Harbor seals hauled out along tidal channel at Dosewallips River, October 3, 1991.



Hood Canal Region 8



Region 8: Hood Canal

<u>ID</u>	<u>Location</u>	<u>Code</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Species</u>	<u>Count</u>	<u>Use</u>
237	Port Gamble Bay	08.02	4750.39	12234.90	PV	<100	ALL
238	Port Gamble Bay	08.02	4750.01	12234.90	PV	<100	ALL
239	Quilcene Bay	08.03	4748.86	12251.05	PV	<100	HIGH
240	Quilcene Bay	08.03	4749.43	12251.47	PV	<100	HIGH
241	Quilcene Bay	08.03	4747.55	12250.99	PV	100-500	ALL
242	Dosewallips River	08.04	4741.15	12253.75	PV	100-500	HIGH
243	Dosewallips River	08.04	4741.38	12253.65	PV	<100	HIGH
244	Duckabush River	08.05	4738.93	12255.94	PV	100-500	HIGH
245	Duckabush River	08.05	4739.06	12255.87	PV	<100	HIGH
246	HammaHamma River	08.06	4732.71	12302.18	PV	100-500	HIGH
247	Jorsted Creek	08.07	4731.72	12302.86	PV	<100	ALL
248	Skokomish River	08.08	4720.57	12307.00	PV	100-500	HIGH
249	Skokomish River	08.08	4720.48	12307.36	PV	100-500	HIGH
250	Belfair Floats	08.09	4725.05	12252.31	PV	<100	ALL
251	Belfair Floats	08.09	4724.44	12253.32	PV	<100	ALL
252	Belfair Floats	08.09	4724.14	12253.69	PV	<100	ALL
253	Dabob Bay/Long Spit	08.11	4750.86	12248.54	PV	<100	HIGH
254	Dabob Bay/Broad Spit	08.12	4749.14	12249.33	PV	<100	HIGH
256	Dabob Bay/Pulali Point	08.13	4744.22	12251.44	PV	<100	HIGH



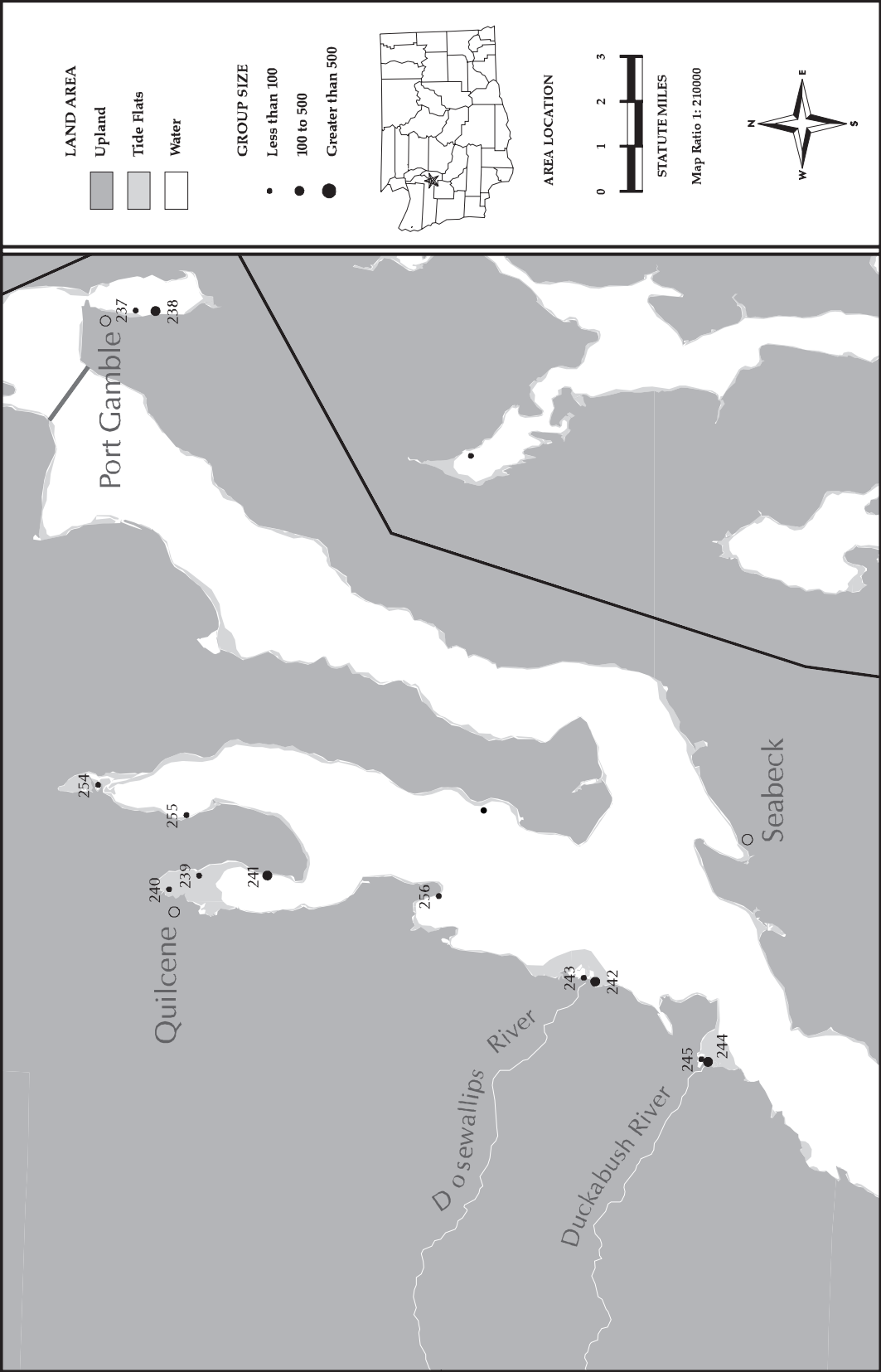
Region 8: Hood Canal

ID Description

- 237 North log booms along west side of Port Gamble Bay.
- 238 South log booms along west side of Port Gamble Bay.
- 239 Log booms on east side of bay.
- 240 Along channels during high tides.
- 241 On net pens and rafts along west side of Bolton Peninsula.
- 242 Along channels north of river mouth during high tides.
- 243 Areas along channels at mouth of river during high tides.
- 244 Areas along channels north of river mouth during high tides.
- 245 Along channels and beach areas north of river during high tides.
- 246 Along channels and beaches west of river mouth during high tides.
- 247 On log booms off Jorstad Creek.
- 248 Along channels off reiver mouth during high tides.
- 249 Along channels and beaches west of river mouth during high tides.
- 250 On rafts and floats along south side.
- 251 On rafts and floats along south side.
- 252 On rafts and floats along south side.
- 254 Beach and floats at Long Spit during high tides.
- 255 On rafts and floats on east side of Bolton Peninsula at Broad Spit.
- 256 Intertidal rocks off Pulali Point in Dabob Bay.

Hood Canal

Map 8A: Hood Canal-North



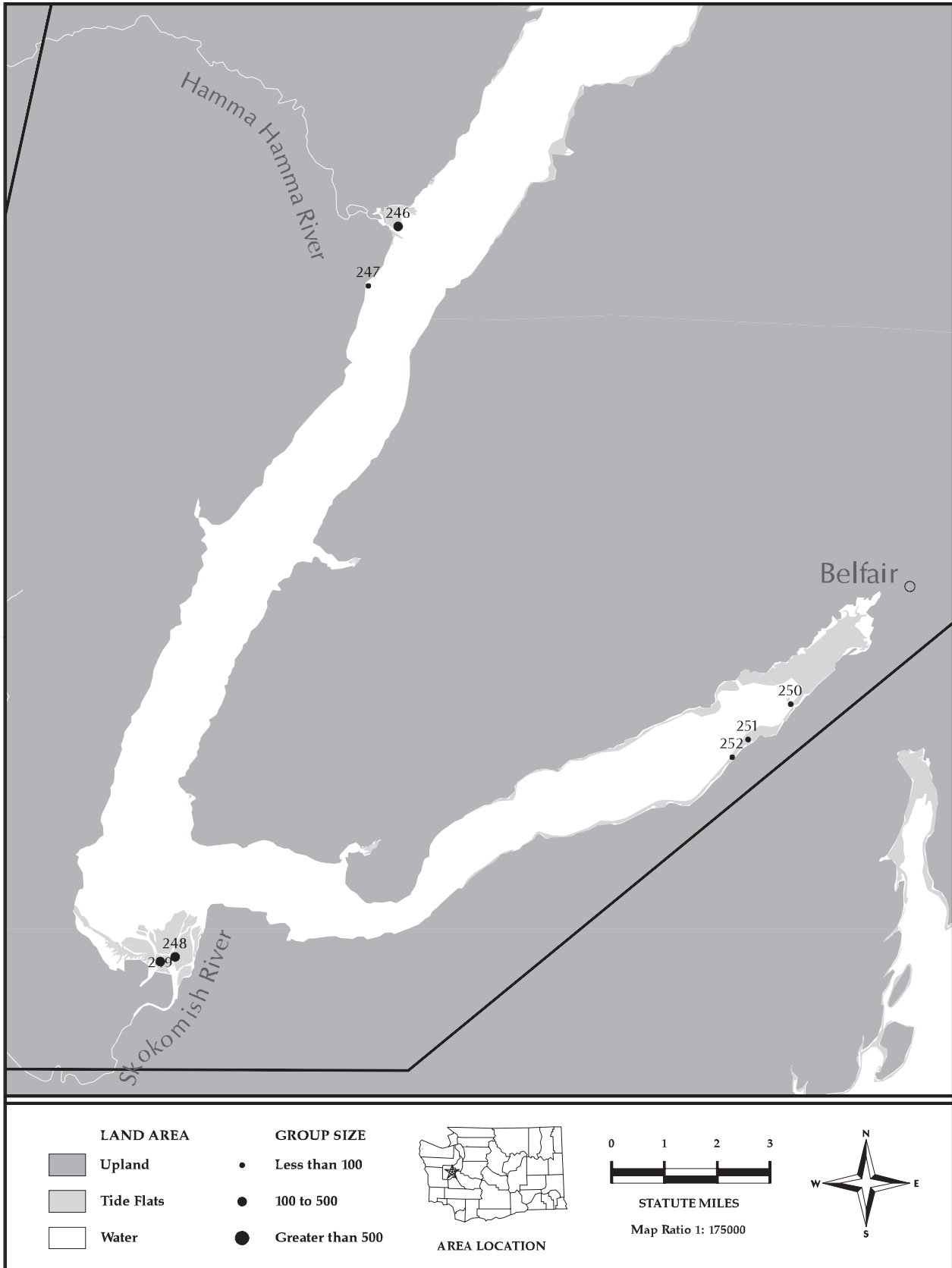
Hood Canal

Map 8A: Hood Canal-North

ID	Location	Latitude	Longitude	Species	Description
237	Port Gamble Bay	4750.39	12234.90	PV	North log booms along west side of Port Gamble Bay.
238	Port Gamble Bay	4750.01	12234.90	PV	South log booms along west side of Port Gamble Bay.
239	Quilcene Bay	4748.86	12251.05	PV	Log booms on east side of Quilcene Bay.
240	Quilcene Bay	4749.43	12251.47	PV	Along channels at river mouth during high tides.
241	Quilcene Bay	4747.55	12250.99	PV	On net pens and oyster floats on west side of Bolton Peninsula.
242	Dosewallips River	4741.15	12253.75	PV	Along channels north of river mouth at high tide.
243	Dosewallips River	4741.38	12253.65	PV	Areas along channels at mouth of river at high and low tide.
244	Duckabush River	4738.93	12255.94	PV	Areas along channels north of river mouth at high tide.
245	Duckabush River	4739.06	12255.87	PV	Areas along channel at mouth of river.
254	Dabob Bay/Long Spit	4750.86	12248.54	PV	Beach and floats at Long Spit during high tides.
255	Dabob Bay/Broad Spit	4749.14	12249.33	PV	On rafts and floats on east side of Bolton Peninsula at Broad Spit.
256	Dabob Bay/Pulali Point	4744.22	12251.44	PV	Intertidal rocks off Pulali Point in Dabob Bay.

Hood Canal

Map 8B: Hood Canal-South



Hood Canal

Map 8B: Hood Canal-South

<u>ID</u>	<u>Location</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Species</u>	<u>Description</u>
246	HammaHamma River	4732.71	12302.18	PV	Along channels and beach areas north of river during high tides.
247	Jorsted Creek	4731.72	12302.86	PV	On log booms off Jorstad Creek.
248	Skokomish River	4720.57	12307.00	PV	Along channels off river mouth during high tides.
249	Skokomish River	4720.48	12307.36	PV	Along channels and beaches west of river mouth during high tides.
250	Belfair Floats	4725.05	12252.31	PV	On rafts and floats along south side.
251	Belfair Floats	4724.44	12353.32	PV	On rafts and floats along south side.
252	Belfair Floats	4724.14	12353.69	PV	On rafts and floats along south side.

Region 9: Eastern Bays

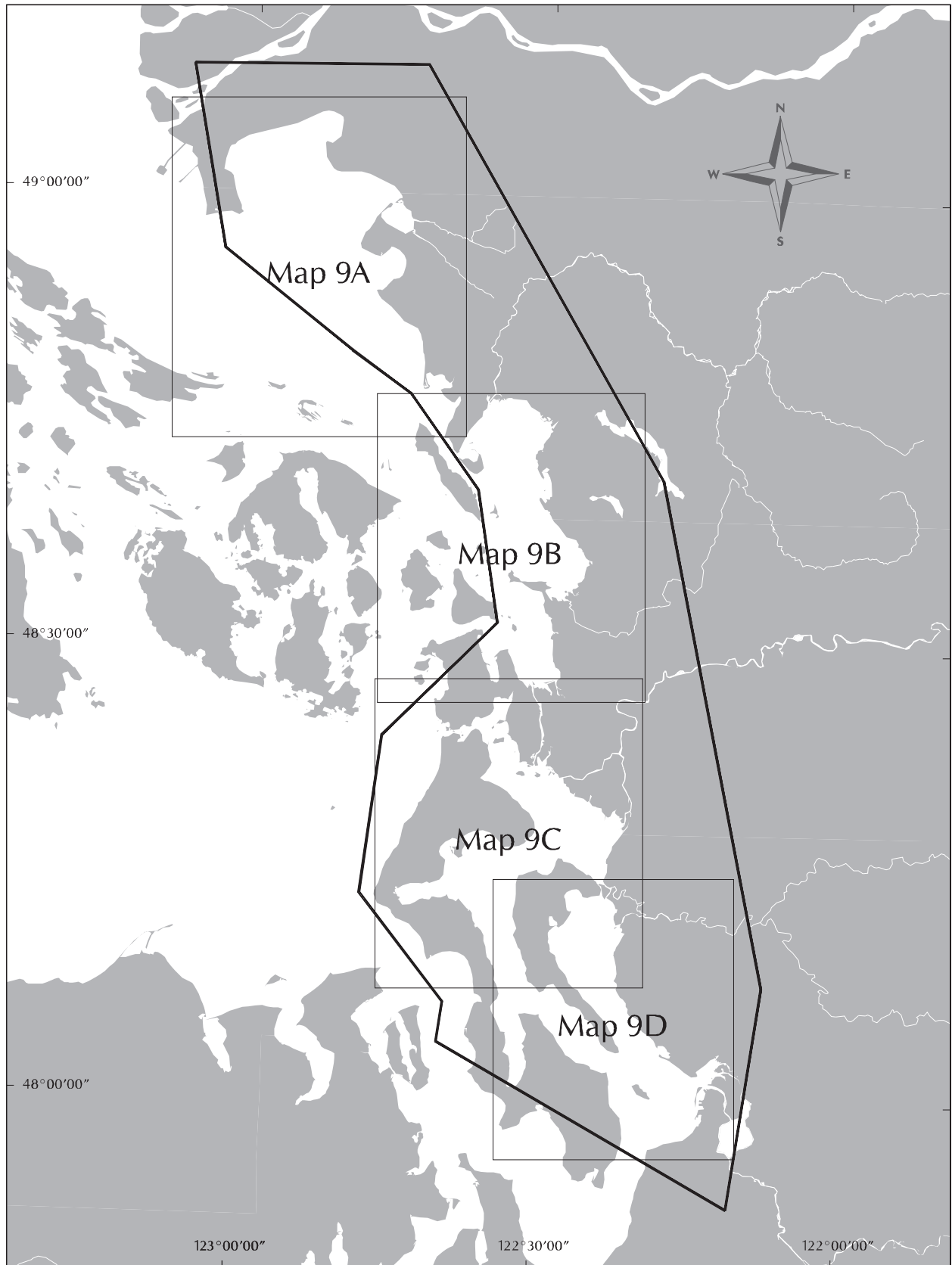
Use NOAA Charts 18421 (Strait of Juan de Fuca and Strait of Georgia/Drayton Harbor), 18441 (Puget Sound-northern part) for navigation and bathymetry details.

Harbor seal haulout areas are located on intertidal mudflats, sandbars and along channels in all areas in this region. Large groups are present seasonally in Boundary Bay and Skagit Bay. Use of areas along river channels may be used seasonally during smelt and salmon runs. Logbooms and marina floats are also used by harbor seals in several areas as well. Peak counts are made during the pupping season (mid-June through mid-August) and annual molt (August through October). Primary California sea lion haulout areas are located on logbooms at the Port of Everett, and is used from mid-September through May. Small numbers of sea lions may also be found on various navigation buoys in this region as well.



Harbor seals hauled out on intertidal shoal off Pt. Brown, Skagit Bay, August 21, 1991.

Eastern Bays Region 9



Region 9: Eastern Bays

<u>ID</u>	<u>Location</u>	<u>Code</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Species</u>	<u>Count</u>	<u>Use</u>
257	Point Roberts/SE Rocks	09.02	4958.46	12301.13	PV	<100	LOW
258	West Boundary Bay	09.03	4902.63	12300.31	PV	<100	LOW
259	Boundary Bay, off Runway	09.04	4902.45	12259.37	PV	500>	LOW
260	E Boundary Bay (Mud Bay)	09.05	4902.83	12255.57	PV	100-500	LOW
261	E Boundary Bay (Mud Bay)	09.05	4904.19	12253.78	PV	<100	LOW
262	Rocks off Kwomais Point	09.06	4901.74	12252.52	PV	<100	LOW
263	Drayton Harbor	09.07	4958.30	12244.00	PV	<100	LOW
264	Drayton Harbor	09.07	4858.73	12245.07	PV	<100	LOW
265	Drayton Harbor	09.08	4859.11	12246.42	PV	100-500	ALL
266	Rocks off Birch Point	09.09	4856.92	12249.24	PV	<100	LOW
267	Point Whitehorn	09.10	4853.05	12247.05	PV	<100	LOW
268	Lummi Bay	09.11	4846.99	12241.02	PV	<100	LOW
269	Bellingham Bay	09.12	4844.28	12229.82	PV	<100	ALL
270	Bellingham Bay	09.12	4844.12	12229.96	PV	<100	ALL
271	Bellingham Bay	09.12	4843.43	12230.43	PV	<100	ALL
272	Spit N of Portage Bay	09.13	4843.61	12237.84	PV	<100	LOW
273	Nooksack River Mouth	09.14	4846.09	12235.90	PV	<100	LOW
274	Chuckanut Bay Area	09.15	4840.99	12230.05	PV	<100	LOW
275	Rocks off Wildcat Cove	09.16	4839.22	12229.73	PV	<100	LOW
276	Eliza Rocks	09.17	4838.63	12234.60	PV	100-500	LOW
277	Samish Bay Area	09.18	4833.57	12228.14	PV	<100	LOW
278	Samish Bay Area	09.19	4834.34	12227.59	PV	100-500	LOW
279	Padilla Bay Area	09.20	4833.41	12231.22	PV	<100	LOW
280	Padilla Bay Area	09.21	4832.34	12230.76	PV	100-500	LOW
281	Padilla Bay Area	09.22	4831.21	12229.72	PV	<100	LOW
282	Padilla Bay Area	09.23	4828.84	12229.20	PV	<100	LOW
283	Padilla Bay Area	09.23	4828.56	12228.99	PV	<100	LOW
284	Padilla Bay Area	09.23	4828.55	12229.36	PV	<100	LOW
285	Padilla Bay Area	09.24	4828.37	12230.88	PV	100-500	LOW
286	Padilla Bay Area	09.24	4828.10	12230.94	PV	<100	LOW
287	Padilla Bay Area	09.24	4829.03	12230.80	PV	<100	LOW
288	Padilla Bay Area	09.25	4829.10	12232.55	PV	<100	LOW
289	Padilla Bay Area	09.25	4829.16	12232.35	PV	<100	LOW
290	Fidalgo Bay	09.27	4829.74	12235.94	PV	<100	ALL
291	Fidalgo Bay	09.27	4829.89	12235.06	PV	100-500	ALL
292	Similk Bay	09.28	4826.45	12233.44	PV	<100	ALL
293	Seal Rocks	09.29	4822.46	12233.71	PV	<100	LOW
294	N Skagit Bay	09.30	4821.47	12231.30	PV	<100	LOW
295	S Skagit Bay Area	09.31	4817.09	12223.03	PV	<100	LOW
296	S Skagit Bay Area	09.31	4817.83	12224.53	PV	<100	LOW
297	S Skagit Bay Area	09.31	4817.53	12224.17	PV	<100	LOW
298	S Skagit Bay Area	09.31	4817.10	12224.22	PV	<100	LOW
299	S Skagit Bay Area	09.31	4817.86	12223.16	PV	<100	LOW
300	Skagit Bay/N of Point Brown	09.32	4816.30	12226.54	PV	100-500	LOW
301	Port Susan/Livingston Bay	09.33	4813.33	12225.87	PV	<100	LOW
302	Port Susan/Livingston Bay	09.34	4812.59	12223.75	PV	100-500	LOW
303	Port Susan/Livingston Bay	09.34	4812.03	12223.32	PV	<100	LOW
304	Gedney Island marina	09.35	4801.25	12219.19	PV	<100	ALL
305	Snohomish River log booms	09.36	4802.61	12212.34	PV	<100	ALL
306	Everett Harbor Area	09.37	4759.60	12213.28	ZC,PV	100-500	ALL
307	Baby Island	09.38	4805.98	12231.56	PV	<100	LOW
308	Penn Cove/Oak Harbor	09.39	4816.07	12237.37	PV	<100	LOW
309	Everett Harbor Bouys	09.40	4759.45	12214.91	ZC	<10	ALL

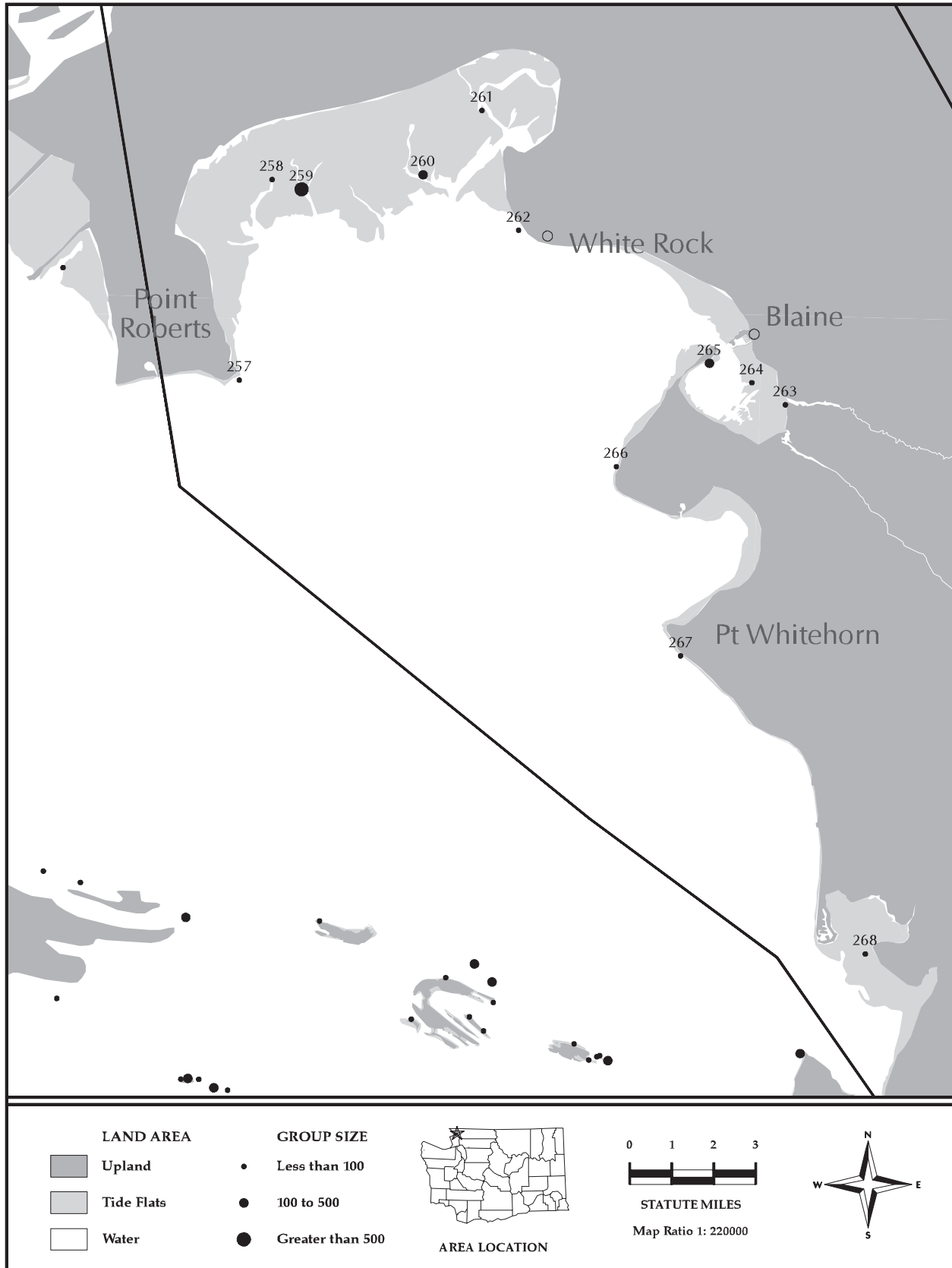


Region 9: Eastern Bays

<u>ID</u>	<u>Description</u>
257	Scattered intertidal rocks off southeast corner of Point Roberts
258	Along channels in northwest Boundary Bay. Nursery area.
259	Main channel south of Boundary Bay airport. Nursery area.
260	Channels northwest of Crescent Beach in Mud Bay. Nursery area.
261	Channels in Mud Bay. Nursery area.
262	Scattered intertidal rocks off Kwomais Point.
263	Channels along Dakota Creek in Drayton Harbor.
264	On intertidal shoals and tideflats in central Drayton Harbor.
265	On floats at Semiahmoo Marina in Drayton Harbor.
266	Scattered intertidal rocks off Birch Point.
267	Scattered intertidal rocks off Point Whitehorn.
268	Intertidal areas and shoals in Lummi Bay.
269	On log booms in Bellingham Bay.
270	On log booms in Bellingham Bay.
271	On log booms in Bellingham Bay.
272	Beach areas along spit north of Portage Bay.
273	On shoals and along channels at mouth of Nooksack River.
274	Scattered intertidal rocks and reefs in Chuckanut Bay.
275	Scattered intertidal rocks and reefs off Larabee State Park.
276	Intertidal rocks and reef areas off southeast corner of Eliza Island.
277	Along channels at mouth of Samish River.
278	Along channels north of Edison Slough, Samish Bay.
279	Along channels in north Padilla Bay.
280	Along channels east of Saddlebag Island in Padilla Bay. Nursery area.
281	Along channels of Joe Leary Slough in Padilla Bay.
282	Along channels in southeast Padilla Bay.
283	Along channels in southeast Padilla Bay. Nursery area.
284	Along channels in southeast Padilla Bay. Nursery area.
285	Along channels east of Swinomish Slough in Padilla Bay.
286	Along channels east of Swinomish Slough in Padilla Bay. Nursery area.
287	Along channels east of Swinomish Slough in Padilla Bay. Nursery area.
288	Along channels west of Swinomish Slough in Padilla Bay. Nursery area.
289	Along channels west of Swinomish Slough in Padilla Bay. Nursery area.
290	On log booms at mill on west side of Fidalgo Bay.
291	On log booms anchored in middle of Fidalgo Bay.
292	On log booms in Similk Bay.
293	On intertidal rocks and reef area around Seal Rocks.
294	Along channels south of Goat Island in Skagit Bay.
295	Along channels off south arms of Skagit River in Skagit Bay. Nursery area.
296	Along channels off south arms of Skagit River in Skagit Bay. Nursery area.
297	Along channels off south arms of Skagit River in Skagit Bay. Nursery area.
298	Along channels off south arms of Skagit River in Skagit Bay. Nursery area.
299	Along channels off south arms of Skagit River in Skagit Bay. Nursery area.
300	On intertidal shoals north of Point Brown in Skagit Bay.
301	Along channels in Livingston Bay.
302	Along channels of South Pass into Port Susan.
303	Along channels off mouth of Stillaguamish River in Port Susan.
304	On barge and log boom breakwater at Gedney Island marina.
305	Log booms along Snohomish River.
306	Log booms at Port of Everett/Navy Homeport.
307	Beaches and intertidal areas around Baby Island.
308	Scattered intertidal rocks and reef areas near Oak Harbor.
309	Everett Harbor bouy.

Eastern Bays

Map 9A: Boundary Bay to Lummi Bay



Eastern Bays

Map 9A: Boundary Bay to Lummi Bay

<u>ID</u>	<u>Location</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Species</u>	<u>Description</u>
257	Point Roberts/SE rocks	4858.46	12301.13	PV	Scattered intertidal rocks off southeast corner of Point Roberts.
258	NW Boundary Bay	4902.63	12300.31	PV	Along channels in NW Boundary Bay. Nursery area.
259	Boundary Bay, off airport	4902.45	12259.37	PV	Main channel off runway at Boundary Bay airport. Nursery area.
260	E Boundary Bay/Mud Bay	4902.83	12255.57	PV	Channels in Mud Bay NW of Crescent Beach. Nursery area.
261	E Boundary Bay/Mud Bay	4904.19	12253.78	PV	Along channels in Mud Bay. Nursery area.
262	Rocks off Kwomais Point	4901.74	12252.52	PV	Scattered intertidal rocks off Kwomais Point.
263	Drayton Harbor	4858.30	12244.00	PV	Along channels off Dakota Creek.
264	Drayton Harbor	4858.73	12245.07	PV	On shoals and channels in central Drayton Harbor.
265	Drayton Harbor	4859.11	12246.42	PV	On floats at Semiahmoo Marina.
266	Rocks off Birch Point	4856.92	12249.24	PV	Scattered intertidal rocks off Birch Point.
267	Point Whitehorn	4853.05	12247.05	PV	Scattered intertidal rocks off Point Whitehorn.
268	Lummi Bay	4846.99	12241.02	PV	Intertidal areas and tideflats in Lummi Bay.



Harbor seals on marina floats at Semiahmoo, August 22, 1991.

Eastern Bays

Map 9B: Bellingham Bay to Padilla Bay



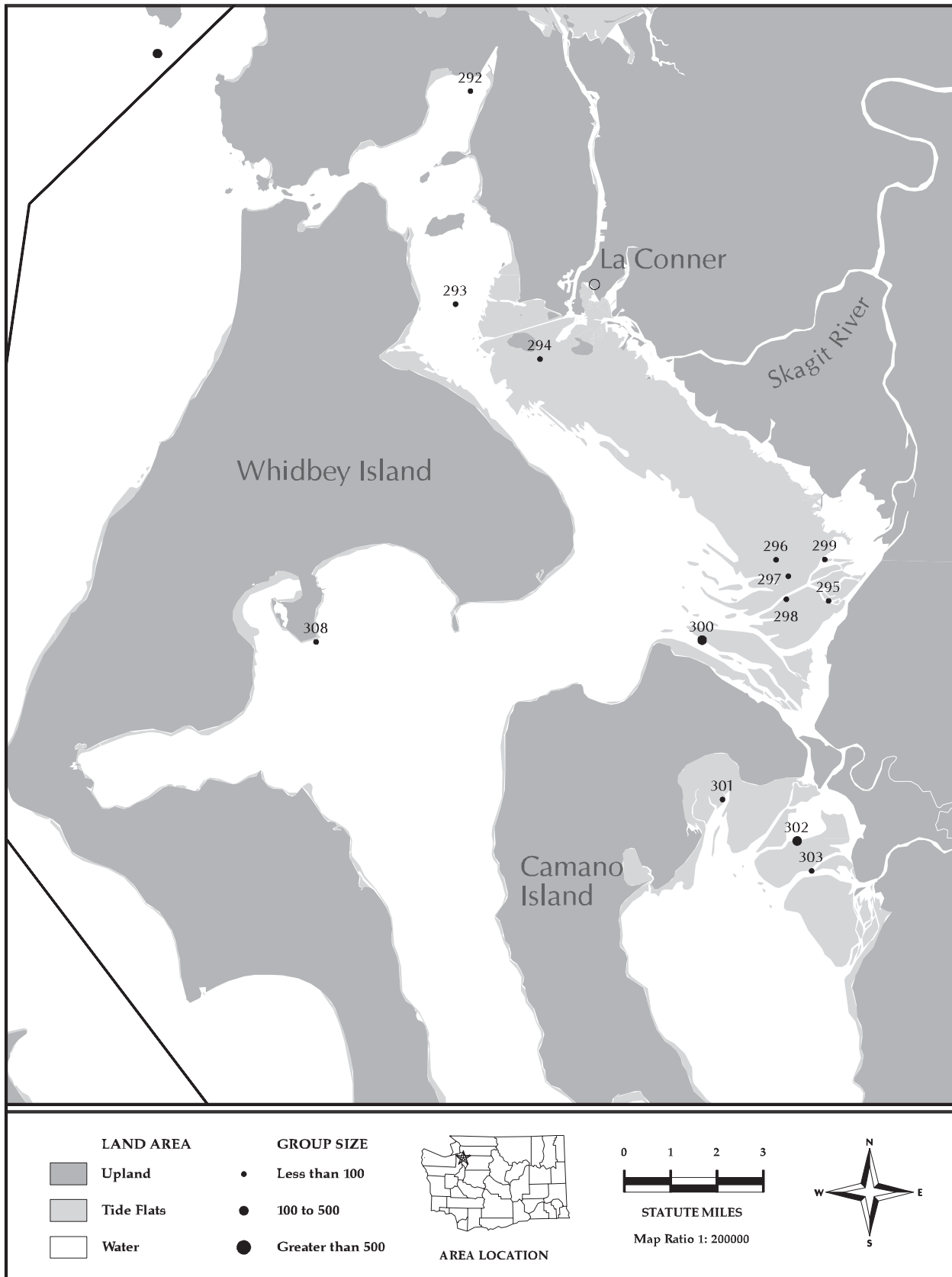
Eastern Bays

Map 9B: Bellingham Bay to Padilla Bay

ID	Location	Latitude	Longitude	Species	Description
269	Bellingham Bay	48.44.28	122.29.82	PV	On log booms in Bellingham Bay.
270	Bellingham Bay	48.44.12	122.29.96	PV	On log booms in Bellingham Bay.
271	Bellingham Bay	48.43.43	122.30.43	PV	On log booms in Bellingham Bay.
272	Spit N of Portage Bay	48.43.61	122.37.84	PV	Beach areas along spit to north of Portage Bay.
273	Nooksack River Mouth	48.46.09	122.35.90	PV	On shoals and along channels at mouth of Nooksack River.
274	Chuckanut Bay Area	48.40.99	122.30.05	PV	Scattered intertidal rocks and reefs in Chuckanut Bay.
275	Rocks off Wildcat Cove	48.39.22	122.29.73	PV	Scattered intertidal rocks and reefs off Larabee State Park.
276	Eliza Rocks	48.38.63	122.34.60	PV	Intertidal rocks and reef areas off southeast end of Eliza Island.
277	Samish Bay Area	48.33.57	122.28.14	PV	Along channels at mouth of Samish River.
278	Samish Bay Area	48.34.34	122.27.59	PV	Along channels north of Edison Slough.
279	Padilla Bay Area	48.33.41	122.31.22	PV	Along channels in north Padilla Bay.
280	Padilla Bay Area	48.32.34	122.30.76	PV	Along channels east of Saddlebag Island. Nursery area.
281	Padilla Bay Area	48.31.21	122.29.72	PV	Along channels of Joe Leary Slough.
282	Padilla Bay Area	48.28.84	122.29.20	PV	Along channels in southeast Padilla Bay.
283	Padilla Bay Area	48.28.56	122.28.99	PV	Along channels in southeast Padilla Bay. Nursery area.
284	Padilla Bay Area	48.28.55	122.29.36	PV	Along channels in southeast Padilla Bay. Nursery area.
285	Padilla Bay Area	48.28.37	122.30.88	PV	Along channels east of Swinomish Slough.
286	Padilla Bay Area	48.28.10	122.30.94	PV	Along channels east of Swinomish Slough. Nursery area.
287	Padilla Bay Area	48.29.03	122.30.80	PV	Along channels east of Swinomish Slough. Nursery area.
288	Padilla Bay Area	48.29.10	122.32.55	PV	Along channels west of Swinomish Slough. Nursery area.
289	Padilla Bay Area	48.29.16	122.32.35	PV	Along channels west of Swinomish Slough. Nursery area.
290	Fidalgo Bay	48.29.74	122.35.94	PV	On log booms at mill on west side of Fidalgo Bay.
291	Fidalgo Bay	48.29.89	122.35.06	PV	On log booms anchored in middle of Fidalgo Bay.

Eastern Bays

Map 9C: Skagit Bay to Port Susan



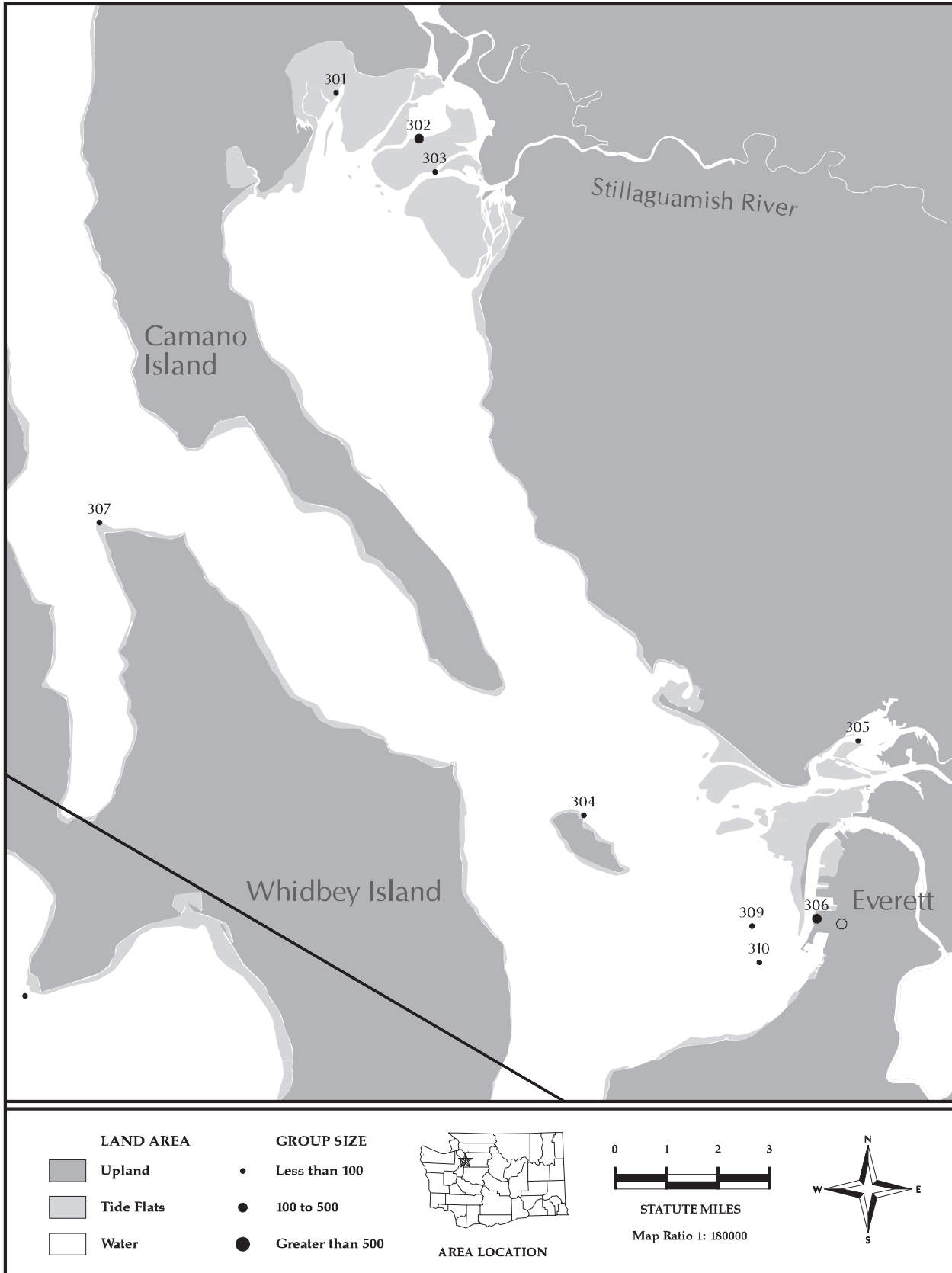
Eastern Bays

Map 9C: Skagit Bay to Port Susan

ID	Location	Latitude	Longitude	Species	Description
292	Similk Bay	48 26.45	122 33.44	PV	On log booms in Similk Bay.
293	Seal Rocks	48 22.46	122 33.71	PV	On intertidal rocks and reef area around Seal Rocks.
294	N Skagit Bay	48 21.47	122 31.30	PV	Along channels south of Goat Island in Skagit Bay.
295	S Skagit Bay Area	48 17.09	122 23.03	PV	Along channels off south arm of Skagit River. Nursery area.
296	S Skagit Bay Area	48 17.83	122 24.53	PV	Along channels off south arm of Skagit River. Nursery area.
297	S Skagit Bay Area	48 17.53	122 24.17	PV	Along channels off south arm of Skagit River. Nursery area.
298	S Skagit Bay Area	48 17.10	122 24.22	PV	Along channels off south arm of Skagit River. Nursery area.
299	S Skagit Bay Area	48 17.86	122 23.16	PV	Along channels off south arm of Skagit River. Nursery area.
300	Skagit Bay/N of Pt Brown	48 16.30	122 26.54	PV	On shoals north of Point Brown.
301	Port Susan/Livingston Bay	48 13.33	122 25.87	PV	Along channels in Livingston Bay.
302	Port Susan/Stillaguamish	48 12.59	122 23.75	PV	Along channels of South Pass into Skagit Bay.
303	Port Susan/Stillaguamish	48 12.03	122 23.32	PV	Along channels off mouth of Stillaguamish River.
308	Penn Cove/Oak Harbor	48 16.07	122 37.37	PV	Scattered rocks and intertidal areas near Oak Harbor.

Eastern Bays

Map 9D: Port Susan to Everett



Eastern Bays

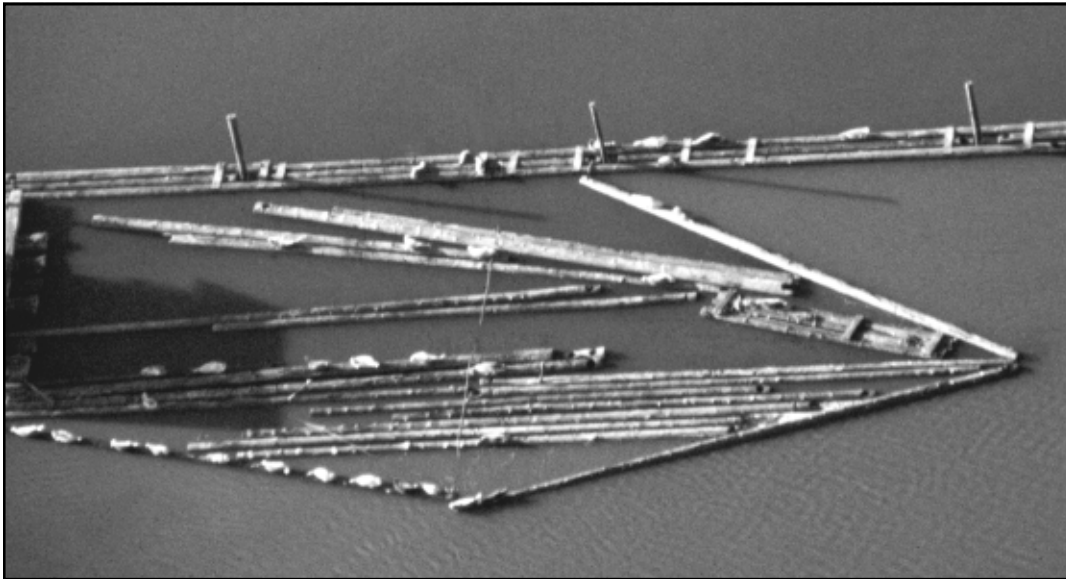
Map 9D: Port Susan to Everett

ID	Location	Latitude	Longitude	Species	Description
301	Port Susan/Livingston Bay	48 13.33	122 25.87	PV	Along channels in Livingston Bay.
302	Port Susan/Stillaguamish	48 12.59	122 23.75	PV	Along channels of South Pass into Skagit Bay.
303	Port Susan/Stillaguamish	48 12.03	122 23.32	PV	Along channels off mouth of Stillaguamish River.
304	Gedney Island Marina	48 1.25	122 19.19	PV	On barge and log booms at entrance to Gedney Island marina.
305	Snohomish R Log Booms	48 2.61	122 12.34	PV	Log booms at mouth of Snohomish River.
306	Everett Harbor Area	47 59.60	122 13.28	ZC,PV	Log boom areas at the Port of Everett.
307	Baby Island	48 5.98	122 31.56	PV	Beaches and intertidal areas around Baby Island.
309	Everett Harbor Bouys	47 59.45	122 14.91	ZC	Everett Harbor bouy.
310	Everett Harbor Bouys	47 58.84	122 14.70	ZC	Everett Harbor bouy.

Region 10: Puget Sound

Use NOAA Charts 18440 (Puget Sound), 18441 (Puget Sound-northern part), and 18448 (Puget Sound-southern part) for navigation and bathymetry details.

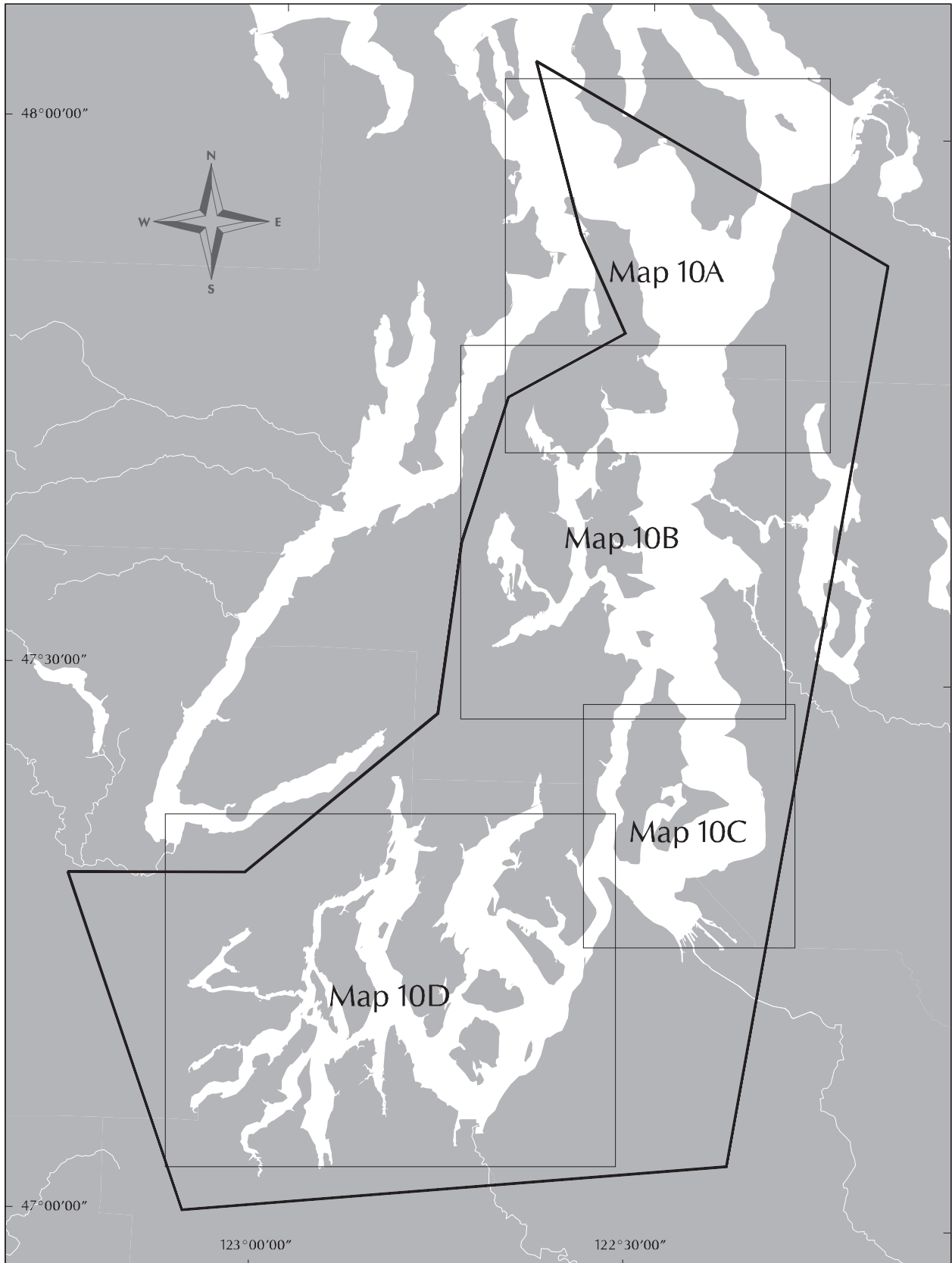
The largest harbor seal haulout sites are located at Gertrude Island, Woodard Bay and Nisqually River in southern Puget Sound. Additional harbor seal haulout sites are scattered throughout the region on intertidal rocks and reefs, logbooms, and recreational floats as well. Peak harbor seal numbers are present on haulout sites during the pupping season (July through early September) and annual molt (September through November). The main California sea lion haulout and rafting area is located near the Shilshole Bay Marina. Small numbers of sea lions (mostly California sea lions) are also regularly found on navigation buoys from the Nisqually Delta to Port Townsend.



Harbor seals hauled out on logbooms at Woodard Bay, December 2, 1986.



Puget Sound Region 10



Region 10: Puget Sound

<u>ID</u>	<u>Location</u>	<u>Survey Code</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Species</u>	<u>Count</u>	<u>Use</u>
311	Liberty Bay/Poulsbo Marina	10.01	4743.85	12238.81	PV	<100	ALL
312	Blakely Rocks	10.02	4735.68	12228.76	PV	<100	LOW
313	Cutts Island	10.03	4719.34	12241.11	PV	100-500	LOW
314	Horsehead Bay Floats	10.04	4717.45	12241.08	PV	<100	ALL
315	Wykoff Shoals	10.05	4714.29	12242.61	PV	<100	LOW
316	Gertrude Island	10.06	4712.95	12239.61	PV	500>	LOW
317	Eagle Island Area	10.07	4711.35	12241.67	PV	100-500	LOW
318	Eagle Island Area	10.07	4711.54	12242.04	ZC	<10	ALL
319	Nisqually Delta Area	10.08	4706.02	12241.96	PV	100-500	LOW
320	Nisqually Delta Bouy	10.08	4706.84	12241.78	ZC	<10	ALL
321	Woodard Bay	10.09	4708.32	12250.29	PV	100-500	ALL
322	McMicken Island	10.10	4714.78	12251.83	PV	<100	LOW
323	Totten Inlet Area	10.11	4707.99	12301.12	PV	<100	ALL
324	Totten Inlet Area	10.11	4708.87	12258.38	PV	<100	ALL
325	Totten Inlet Area	10.11	4708.99	12258.03	PV	<100	ALL
326	Totten Inlet Area	10.11	4708.05	12300.17	PV	<100	ALL
327	Budd Inlet Area	10.12	4704.30	12255.07	PV	<100	ALL
328	Budd Inlet Area	10.12	4703.99	12254.28	PV	<100	ALL
329	Eld Inlet Area	10.13	4704.16	12300.58	PV	<100	ALL
330	Eld Inlet Area	10.13	4705.84	12258.94	PV	<100	ALL
331	Eld Inlet Area	10.13	4705.57	12257.74	PV	<100	ALL
332	Eld Inlet Area	10.13	4705.80	12257.45	PV	<100	ALL
333	Hammersly Inlet/Shelton	10.14	4712.65	12304.99	PV	<100	ALL
334	Hammersly Inlet/Shelton	10.14	4713.66	12302.71	PV	<100	ALL
335	Rosedale Beach Floats	10.15	4720.17	12239.63	PV	<100	ALL
336	Edmonds Wreck/Scuba Float	10.16	4748.89	12222.96	ZC,PV	<100	ALL
337	Bremerton/Dyes Inlet	10.17	4735.45	12240.90	PV	<100	ALL
338	Commencement Bay	10.18	4717.51	12224.76	PV,ZC	<100	ALL
339	Commencement Bay	10.18	4717.36	12224.59	PV	<100	ALL
340	Shilshole Bay Area	10.19	4741.11	12224.38	ZC	<10	ALL
341	Shilshole Bay Area	10.19	4740.69	12224.67	ZC	<100	ALL
342	NW McNeil Island Bouy	10.20	4714.27	12241.06	ZC	<10	ALL
343	NE McNeil/Hyde Point Bouy	10.21	4713.11	12238.51	ZC	<10	ALL
344	Toliva Shoals Bouy	10.22	4712.15	12236.25	ZC,EJ	<10	ALL
345	Yellow 'TC' Bouy	10.23	4719.42	12227.35	ZC	<10	ALL
346	Yellow 'TB' Bouy	10.24	4723.11	12221.11	ZC	<10	ALL
347	Yellow 'TA' Bouy	10.25	4726.87	12224.11	ZC	<10	ALL
348	Yellow 'T' Bouy	10.26	4734.54	12226.96	ZC	<10	ALL
349	West Point Bouy	10.27	4739.60	12226.21	ZC	<10	ALL
350	Yellow 'SG' Bouy	10.28	4739.71	12227.80	ZC	<10	ALL
351	Meadow Pt Bouy	10.29	4741.80	12224.46	ZC	<10	ALL
352	Yellow 'SF' Bouy	10.30	4745.91	12226.17	ZC	<10	ALL
353	Possession Point Bouy	10.31	4753.84	12223.05	ZC	<10	ALL
354	Scatchet Head Bouy	10.32	4754.56	12226.14	ZC	<10	ALL
355	Yellow 'SE' Bouy	10.33	4755.48	12229.59	ZC	<10	ALL
356	Double Bluff Bouy	10.34	4757.98	12233.12	ZC	<10	ALL
357	Yellow 'SD' Bouy	10.35	4757.97	12234.73	ZC	<10	ALL
358	Foulweather Bluff Bouy	10.36	4756.80	12236.12	ZC	<10	ALL
359	Yellow 'SC' Bouy	10.37	4801.87	12238.14	ZC	<10	ALL
360	Restoration Point Bouy	10.38	4735.02	12228.54	ZC	<10	ALL
361	Rich Passage Bouy	10.39	4734.07	12231.28	ZC	<10	ALL
362	Rich Passage Bouy	10.39	4734.56	12232.06	ZC	<10	ALL



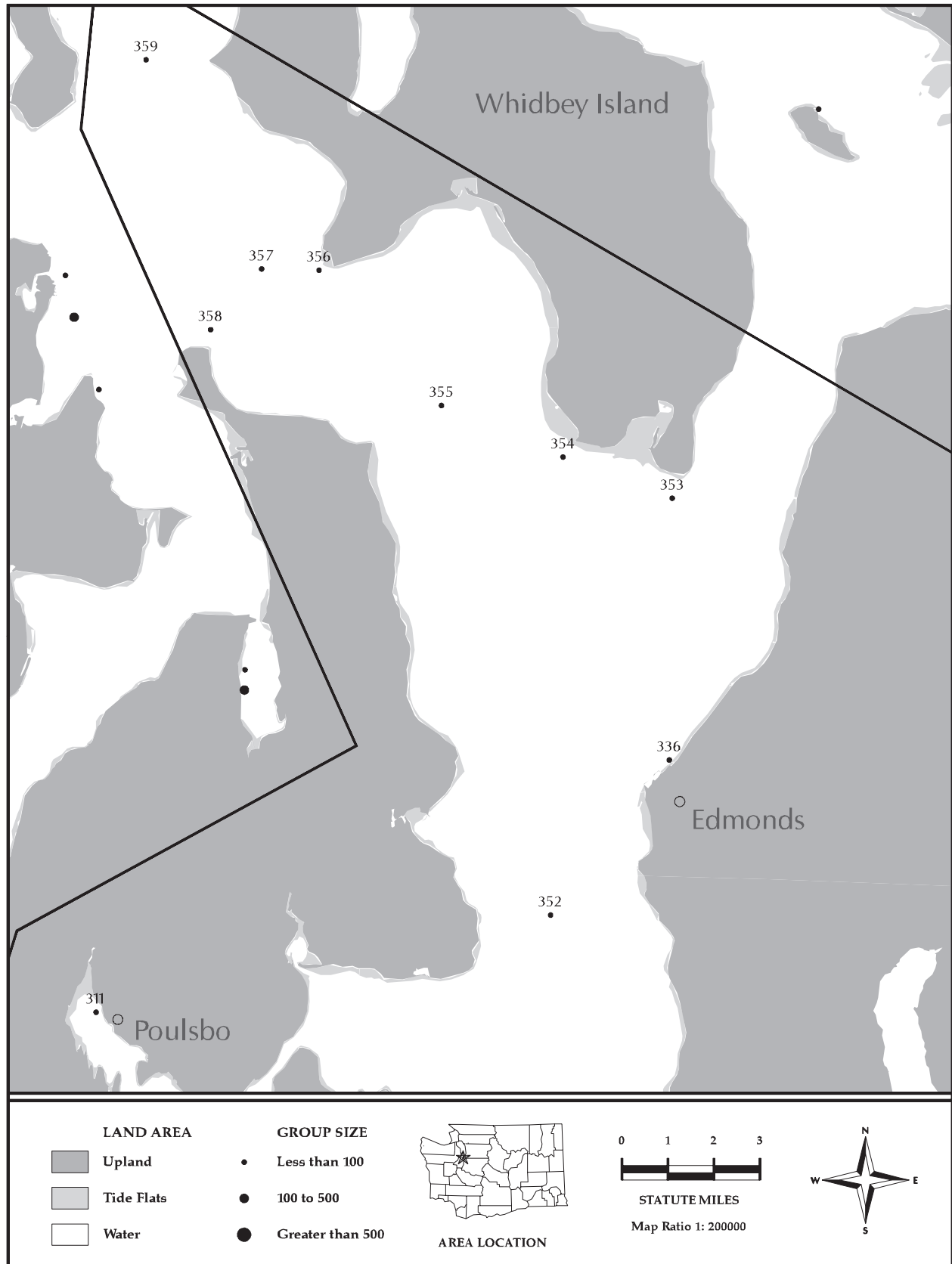
Region 10: Puget Sound

ID	Description
311	On floats and log booms at the Poulsbo marina.
312	On intertidal rocks and reef areas around Blakely Rocks.
313	On spit on north end of island.
314	On floats and rafts in Horsehead Bay.
315	On intertidal areas around Wykoff Shoals.
316	Along beaches and intertidal areas around island. Nursery area.
317	On beach and shoals around Eagle Island.
318	On green bouy west of Eagle Island.
319	Along channels at mouth of river during high tides.
320	On green bouy off Nisqually Delta.
321	On log booms in Woodard Bay (at old Weyerhauser site).
322	Beach and intertidal areas around island.
323	On rafts and floats on west side of inlet.
324	On rafts and log booms on east side of inlet.
325	On log booms on east side of inlet.
326	On rafts and net pens off Gallager Cove.
327	On log booms on west side of Budd Inlet.
328	On shoal area west of Priest Point State Park.
329	On rafts and floats in Mud Bay.
330	On rafts and floats on west side of Eld Inlet.
331	On rafts and floats on east side of Eld Inlet.
332	On rafts and float on east side of Eld Inlet.
333	On log booms off mill at Shelton.
334	On log booms in Chapman Bay.
335	On rafts and floats off Rosedale.
336	On rafts and floats north of ferry dock.
337	On rafts and floats in Dyes Inlet.
338	On bouys and floats in northeast Commencement Bay.
339	On log booms in northeast Commencement Bay.
340	On floats and bouys of Shilshole Bay jetty.
341	On south tip of Shilshole Bay jetty.
342	On white mooring bouy off northwest side of McNeil Island.
343	On white mooring bouy off Hyde Point on northeast side of McNeil Island.
344	On Toliva Shoals bouy.
345	On yellow 'TC' bouy off southeast Maury Island.
346	On yellow 'TB' bouy off Pt. Robinson.
347	On yellow 'TA' bouy off Three Tree Point.
348	On yellow 'T' bouy off Alki Point.
349	On green bouy just off West Point.
350	On yellow 'SG' bouy between West Point and Skiff Point.
351	On green Meadow Point bouy.
352	On yellow 'SF' bouy east of Jefferson Head.
353	On green bouy off Possession Point.
354	On red Scatchet Head bouy.
355	On yellow 'SE' bouy off Point No Point.
356	On green bouy off Double Bluff.
357	On yellow 'SD' bouy just north of Foulweather Bluff.
358	On red bouy off Foulweather Bluff.
359	On yellow 'SC' bouy west of Bush Point.
360	On red bouy off Restoration Point.
361	On red '4' bouy off Orchard Point.
362	On red bouy in Rich Passage.



Puget Sound

Map 10A: Whidbey Island to Poulsbo

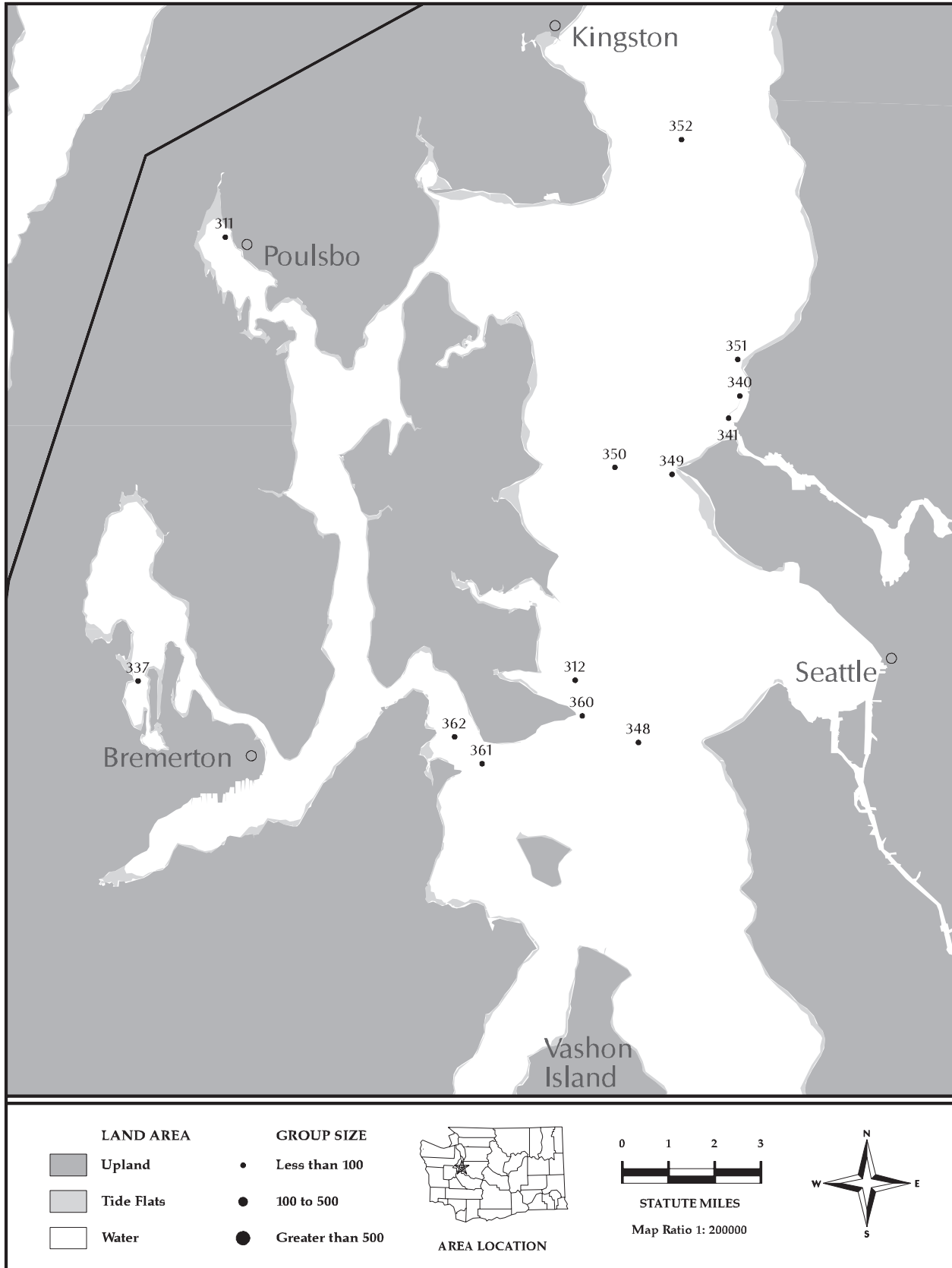


Puget Sound
Map 10A: Whidbey Island to Poulsbo

ID	Location	Latitude	Longitude	Species	Description
311	Liberty Bay/Poulsbo Marina	4743.85	12238.81	PV	On floats and log booms at the Poulsbo marina.
336	Edmonds Wreck/Scuba Flt	4748.89	12222.96	ZC,PV	On rafts and floats north of ferry dock.
352	Yellow 'SF' Bouy	4745.91	12226.17	ZC	On yellow 'SF' bouy east of Jefferson Head.
353	Possession Point Bouy	4753.84	12223.05	ZC	On green bouy off Possession Point.
354	Scatchet Head Bouy	4754.56	12226.14	ZC	On red Scatchet Head bouy.
355	Yellow 'SE' Bouy	4755.48	12229.59	ZC	On yellow 'SE' bouy off Point No Point.
356	Double Bluff Bouy	4757.98	12233.12	ZC	On green bouy off Double Bluff.
357	Yellow 'SD' Bouy	4757.97	12234.73	ZC	On yellow 'SD' bouy just north of Foul weather Bluff.
358	Foulweather Bluff Bouy	4756.80	12236.12	ZC	On red bouy off Foulweather Bluff.
359	Yellow 'SC' Bouy	4801.87	12238.14	ZC	On yellow 'SC' bouy west of Bush Point.

Puget Sound

Map 10B: Kingston to Vashon Island



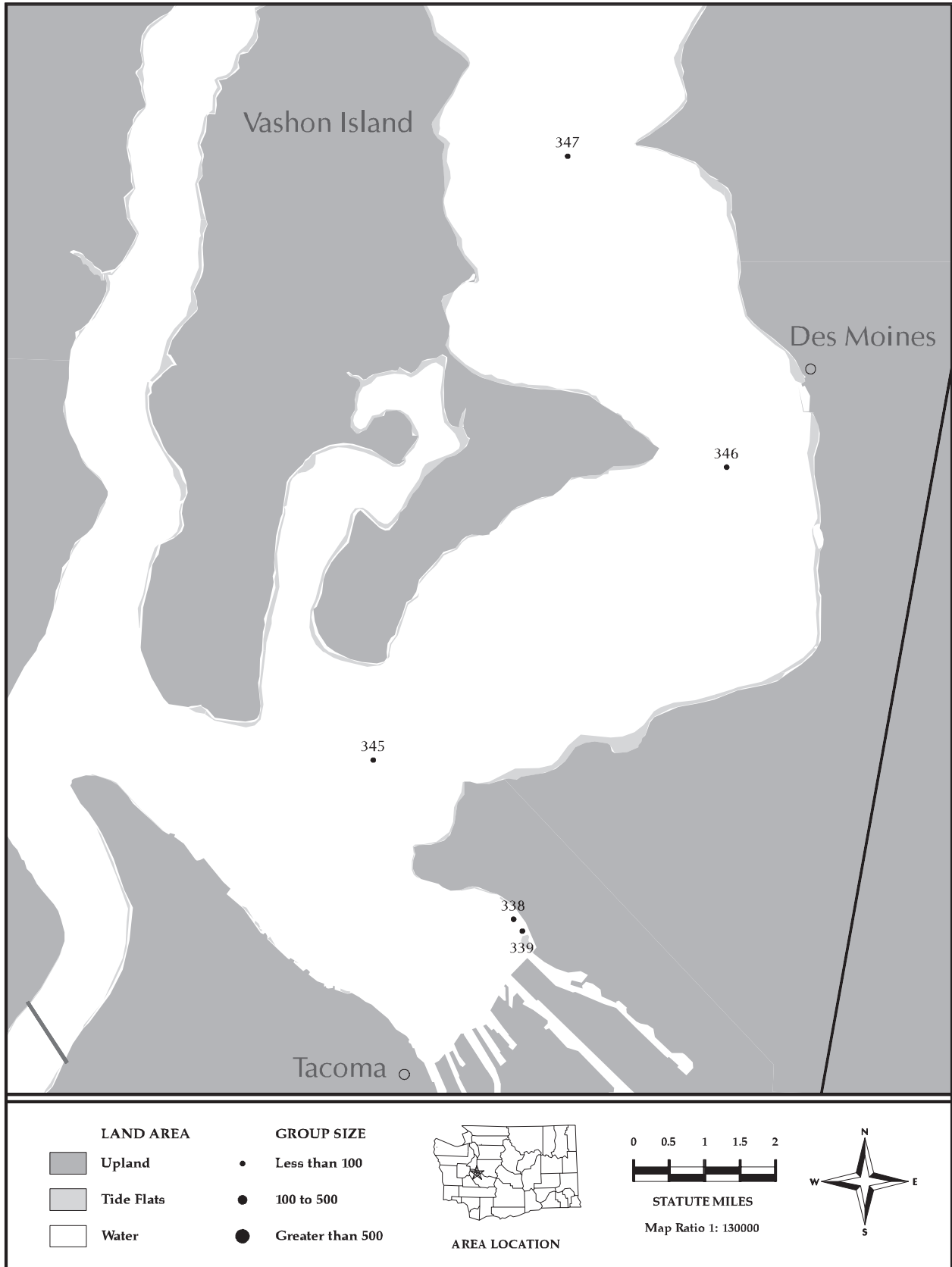
Puget Sound

Map 10B: Kingston to Vashon Island

ID	Location	Latitude	Longitude	Species	Description
311	Liberty Bay/Poulsbo Marina	4743.85	12238.81	PV	On floats and log booms at the Poulsbo marina.
312	Blakely Rocks	4735.68	12228.76	PV	On intertidal rocks and reef areas around Blakely Rocks.
337	Bremerton/Dyes Inlet	4735.45	12240.90	PV	On rafts and floats in Dyes Inlet.
340	Shilshole Bay Area	4741.11	12224.38	ZC	On floats and bouys of Shilshole Bay jetty.
341	Shilshole Bay Area	4740.69	12224.67	ZC	On south tip of Shilshole Bay jetty.
348	Yellow 'T' Bouy	4734.54	12226.96	ZC	On yellow 'T' bouy off Alki Point.
349	West Point Bouy	4739.60	12226.21	ZC	On green bouy just off West Point.
350	Yellow 'SG' Bouy	4739.71	12227.80	ZC	On yellow 'SG' bouy between West Point and Skiff Point.
351	Meadow Point Bouy	4741.80	12224.46	ZC	On green Meadow Point bouy.
352	Yellow 'SF' Bouy	4745.91	12226.17	ZC	On yellow 'SF' bouy east of Jefferson Head.
360	Restoration Point Bouy	4735.02	12228.54	ZC	On red bouy off Restoration Point.
361	Rich Passage Bouy	4734.07	12231.28	ZC	On red '4' bouy off Orchard Point.
362	Rich Passage Bouy	4734.56	12232.06	ZC	On red bouy in Rich Passage.

Puget Sound

Map 10C: Vashon Island to Commencement Bay



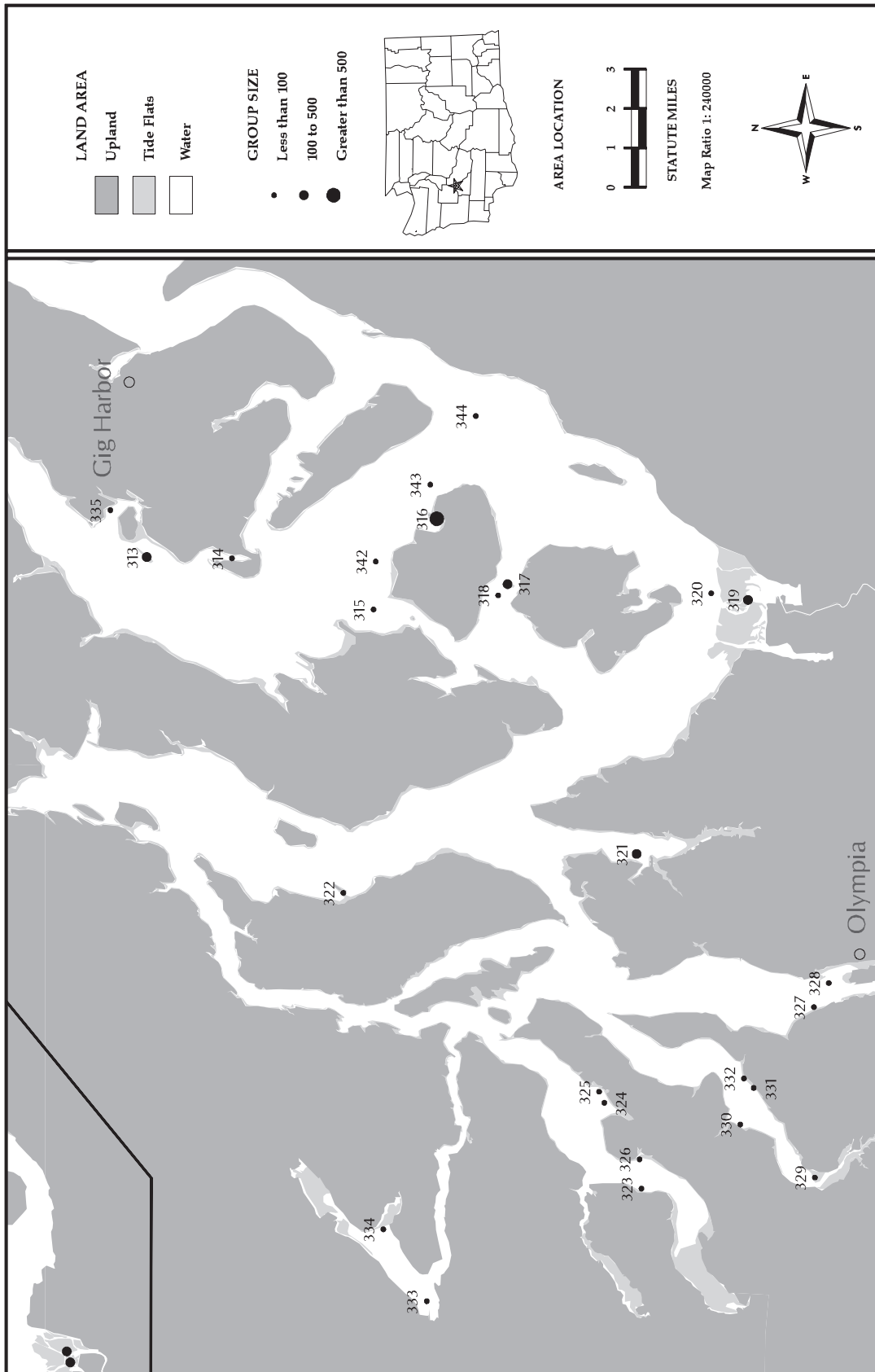
Puget Sound

Map 10C: Vashon Island to Commencement Bay

ID	<u>Location</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Species</u>	<u>Description</u>
338	Commencement Bay	47 17.51	122 24.76	PV,ZC	On bouys and floats in northeast Commencement Bay.
339	Commencement Bay	47 17.36	122 24.59	PV	On log booms in northeast Commencement Bay.
345	Yellow 'TC' Bouy	47 19.42	122 27.35	ZC	On yellow 'TC' bouy off southeast Maury Island.
346	Yellow 'TB' Bouy	47 23.11	122 21.11	ZC	On yellow 'TB' bouy off Point Robinson.
347	Yellow 'TA' Bouy	47 26.87	122 24.11	ZC	On yellow 'TA' bouy off Three Tree Point.

Puget Sound

Map 10D: Gig Harbor to Olympia



Puget Sound

Map 10D: Gig Harbor to Olympia

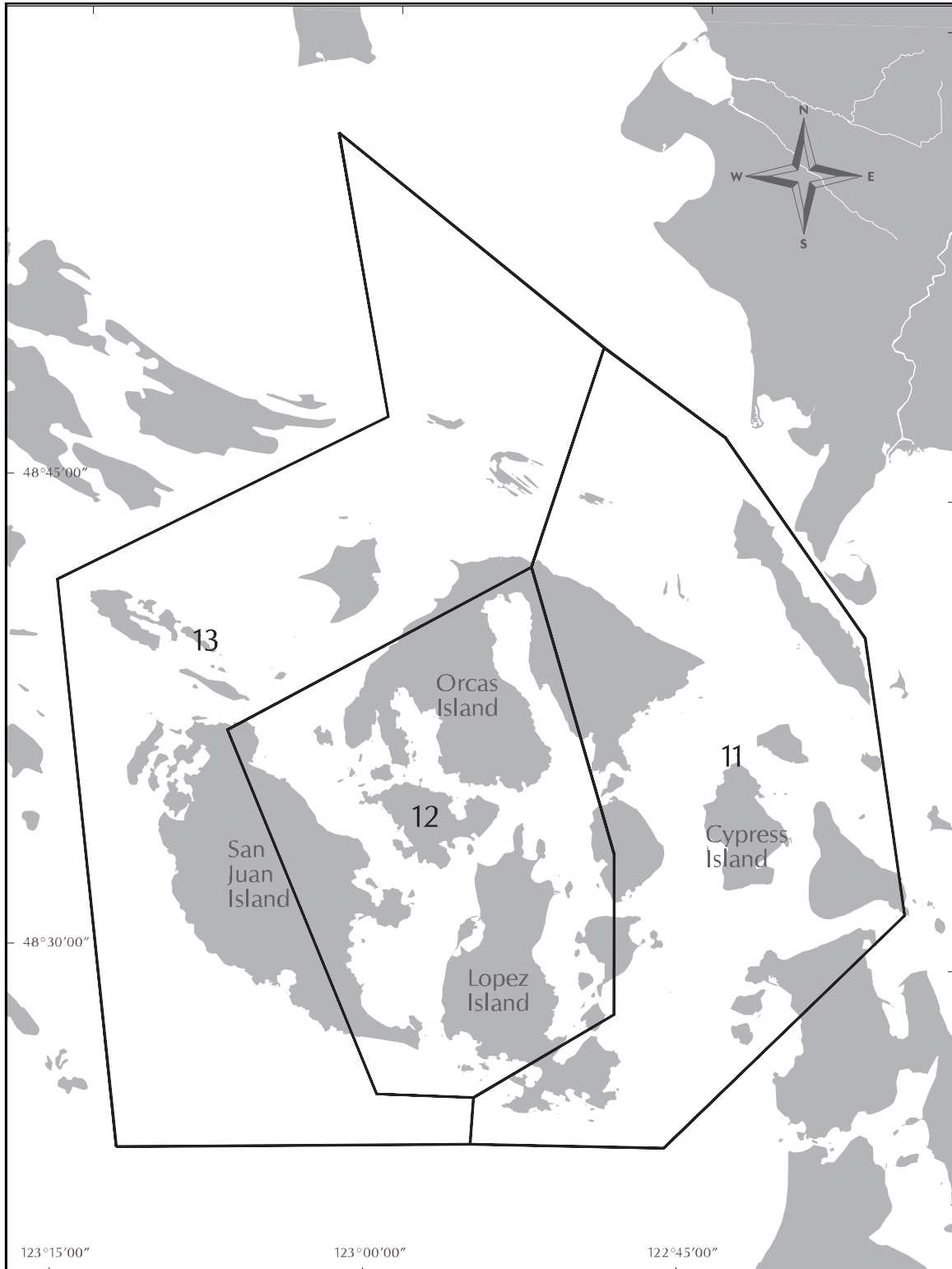
<u>ID</u>	<u>Location</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Species</u>	<u>Description</u>
313	Cutts Island	47 19.34	122 41.11	PV	On spit on north end of island.
314	Horsehead Bay Floats	47 17.45	122 41.08	PV	On floats and rafts in Horsehead Bay.
315	Wykoff Shoals	47 14.29	122 42.61	PV	On intertidal areas around Wykoff Shoals.
316	Gertrude Island	47 12.95	122 39.61	PV	Along beaches and intertidal areas around island. Nursery area.
317	Eagle Island Area	47 11.35	122 41.67	PV	On beach and shoals around Eagle Island.
318	Eagle Island Area	47 11.54	122 42.04	ZC	On green bouy west of Eagle Island.
319	Nisqually Delta Area	47 06.02	122 41.96	PV	Along channels at mouth of river during high tides.
320	Nisqually Delta Bouy	47 06.84	122 41.78	ZC	On green bouy off Nisqually Delta.
321	Woodard Bay	47 08.32	122 50.29	PV	On log booms in Woodard Bay (at old Weyerhauser site).
322	McMicken Island	47 14.78	122 51.83	PV	Beach and intertidal areas around island.
323	Totten Inlet Area	47 07.99	123 01.12	PV	On rafts and floats on west side of inlet.
324	Totten Inlet Area	47 08.87	122 58.38	PV	On rafts and log booms on east side of inlet.
325	Totten Inlet Area	47 08.99	122 58.03	PV	On log booms on east side of inlet.
326	Totten Inlet Area	47 08.05	123 00.17	PV	On rafts and net pens off Gallager Cove.
327	Budd Inlet Area	47 04.30	122 55.07	PV	On log booms on west side of Budd Inlet.
328	Budd Inlet Area	47 03.99	122 54.28	PV	On shoal area west of Priest Point State Park.
329	Eld Inlet Area	47 04.16	123 00.58	PV	On rafts and floats in Mud Bay.
330	Eld Inlet Area	47 05.84	122 58.94	PV	On rafts and floats on west side of Eld Inlet.
331	Eld Inlet Area	47 05.57	122 57.74	PV	On rafts and floats on east side of Eld Inlet.
332	Eld Inlet Area	47 05.80	122 57.45	PV	On rafts and float on east side of Eld Inlet.
333	Hammersly Inlet/Shelton	47 12.65	123 04.99	PV	On log booms off mill at Shelton.
334	Hammersly Inlet/Shelton	47 13.66	123 02.71	PV	On log booms in Chapman Bay.
335	Rosedale Beach Floats	47 20.17	122 39.63	PV	On rafts and floats off Rosedale.
342	NW McNeil Island Bouy	47 14.27	122 41.06	ZC	On white mooring bouy off northwest side of McNeil Island.
343	NE McNeil/Hyde Pt Bouy	47 13.11	122 38.51	ZC	On white mooring bouy off Hyde Point on northeast side of McNeil Island.
344	Toliva Shoals Bouy	47 12.15	122 36.25	ZC,EJ	On Toliva Shoals bouy.





San Juan Islands
Seal and Sea Lion
Haulout Sites

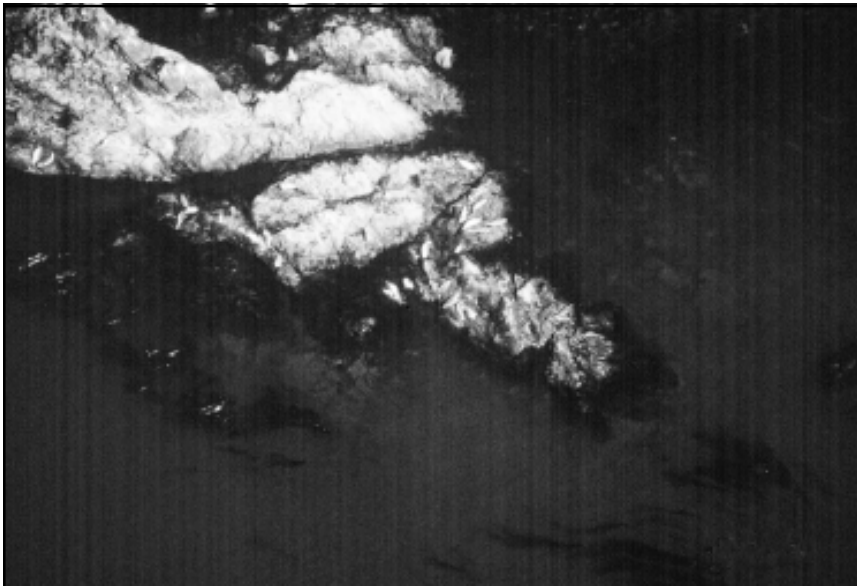
San Juan Islands Regions 11, 12, and 13



Region 11: San Juan Islands- Rosario Strait

Use NOAA Charts 18421 (Strait of Juan de Fuca and Strait of Georgia/Drayton Harbor), 18429 (Rosario Strait-southern part), 18430 (Rosario Strait-northern part), and 18431 (Rosario Strait to Cherry Point) for navigation and bathymetry details.

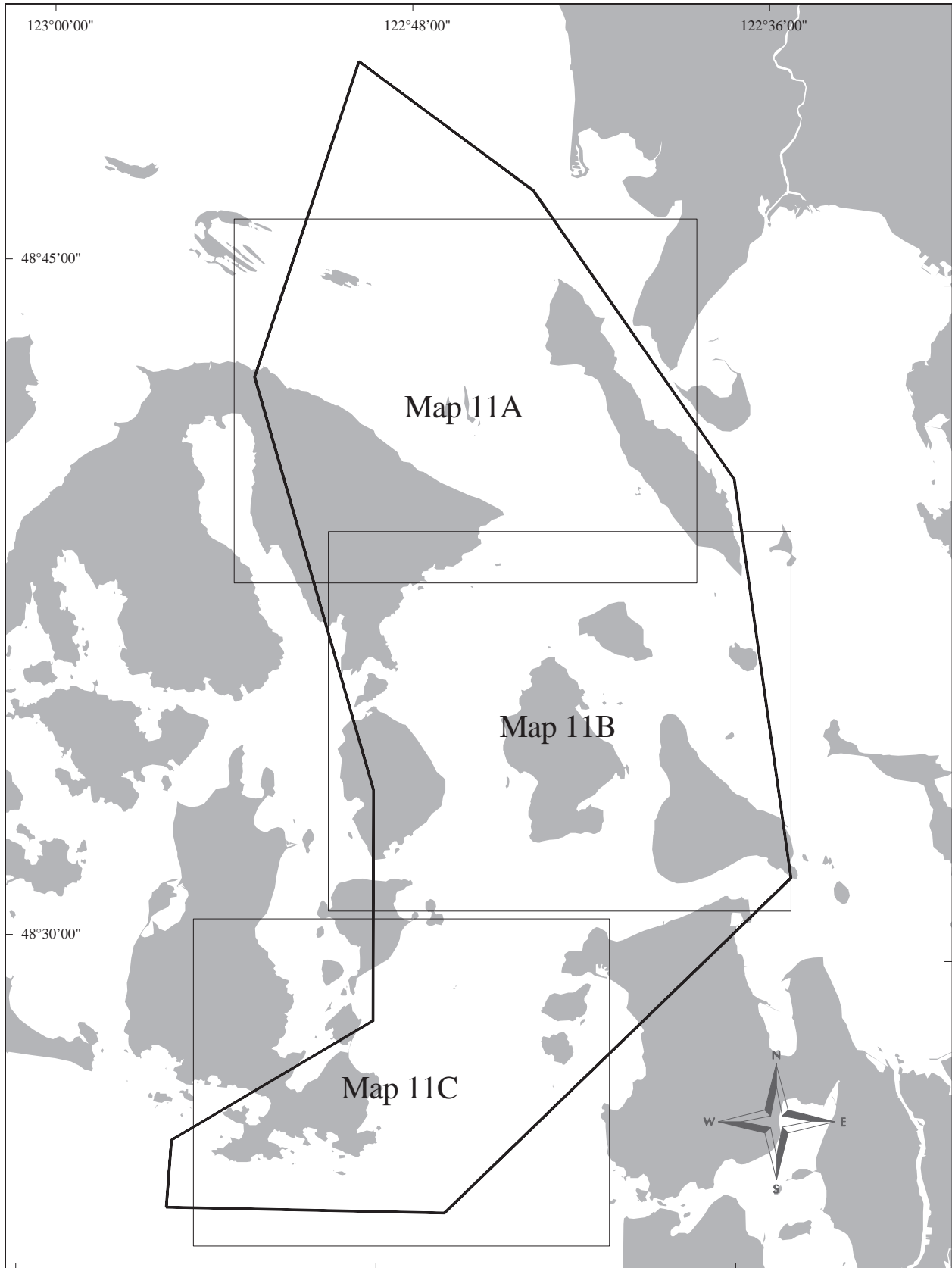
Numerous harbor seal haulout sites are located on intertidal rocks, reefs, and islands in this region. Peak counts occur during the pupping season (mid-June through August) and annual molt (mid-August through October). Small numbers of sea lions may occasionally use navigation buoys.



Harbor seals hauled out along Colville Island, August 13, 1996.



San Juan Islands Region 11: Rosario Strait



Region 11: San Juan Islands: Rosario Strait

<u>ID</u>	<u>Location</u>	<u>Survey Code</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Species</u>	<u>Count</u>	<u>Use</u>
363	Matia Island Area	11.01	4844.96	12250.03	PV	<100	LOW
364	Matia Island Area	11.01	4844.64	12249.55	PV	<100	LOW
365	Puffin Island Area	11.02	4844.71	12249.30	PV	<100	LOW
366	Puffin Island Area	11.02	4844.74	12249.22	PV	<100	LOW
367	Reef East of Puffin Island	11.03	4844.64	12248.95	PV	100-500	LOW
368	Lummi Island/Point Migley	11.04	4844.90	12242.96	PV	100-500	LOW
369	Barnes Island	11.05	4842.23	12246.43	PV	<100	LOW
370	Clark Island	11.06	4842.50	12245.88	PV	100-500	LOW
371	The Sisters Area	11.07	4841.51	12245.53	PV	<100	LOW
372	The Sisters Area	11.07	4841.61	12245.38	PV	<100	LOW
373	Little Sister	11.08	4841.40	12245.49	PV	<100	LOW
374	Middle Peapod Rock	11.09	4838.41	12245.04	PV	<100	LOW
375	North Peapod Rock	11.10	4838.53	12244.71	PV	<100	LOW
376	South Peapod Rock	11.11	4838.04	12245.45	PV	100-500	LOW
377	Boulder Reef Area	11.12	4838.11	12241.35	PV	100-500	LOW
378	Buckeye Shoal	11.13	4837.44	12243.72	PV	<100	LOW
379	Cypress Reef	11.14	4836.98	12243.14	PV	<100	LOW
380	Cone Island	11.15	4835.54	12240.69	PV	<100	LOW
381	Sinclair Island, SE	11.16	4836.77	12239.41	PV	<100	LOW
382	Viti Island	11.17	4837.96	12237.26	PV	<100	LOW
383	Black Rock	11.18	4832.78	12245.85	PV	<100	LOW
384	Pointer Island	11.19	4832.30	12246.85	PV	<100	LOW
385	Lawson Rock	11.20	4831.87	12247.24	PV	<100	LOW
386	Belle Rock	11.21	4829.59	12245.09	PV	<100	LOW
387	Bird Rocks	11.22	4829.10	12245.65	PV	<100	LOW
388	Bird Rocks	11.22	4829.16	12245.61	PV	<100	LOW
389	Bird Rocks	11.22	4829.23	12245.56	PV	<100	LOW
390	Burrows Island/West Side	11.25	4829.03	12242.72	PV	<100	LOW
391	Allan Island/NW End	11.26	4828.06	12242.70	PV	<100	LOW
392	Williamson Rocks	11.27	4826.99	12242.28	PV	100-500	LOW
393	Castle Rock Area	11.28	4825.30	12249.23	PV	<100	LOW
394	Colville Island	11.29	4824.87	12249.24	PV	100-500	LOW
395	Aleck Bay Area	11.30	4825.18	12251.31	PV	<100	LOW
396	Aleck Bay Area	11.30	4825.11	12250.81	PV	<100	LOW
397	Aleck Bay Area	11.30	4825.34	12250.90	PV	<100	LOW
398	Iceberg Point	11.31	4825.21	12253.42	PV	<100	LOW
399	Iceberg Point	11.31	4825.12	12253.08	PV	<100	LOW
400	Iceberg Point	11.32	4825.18	12252.00	PV	<100	LOW
401	Iceberg Island	11.33	4825.66	12253.30	PV	<100	LOW
402	Kellett Ledge	11.34	4827.03	12247.52	PV	<100	LOW
403	Spindle Rock/N Blakely Island	11.35	4835.30	12247.96	PV	<100	LOW
404	Lummi Rocks	11.36	4840.24	12239.94	PV	<100	LOW
405	Vendovi Island	11.37	4837.02	12236.66	PV	100-500	LOW

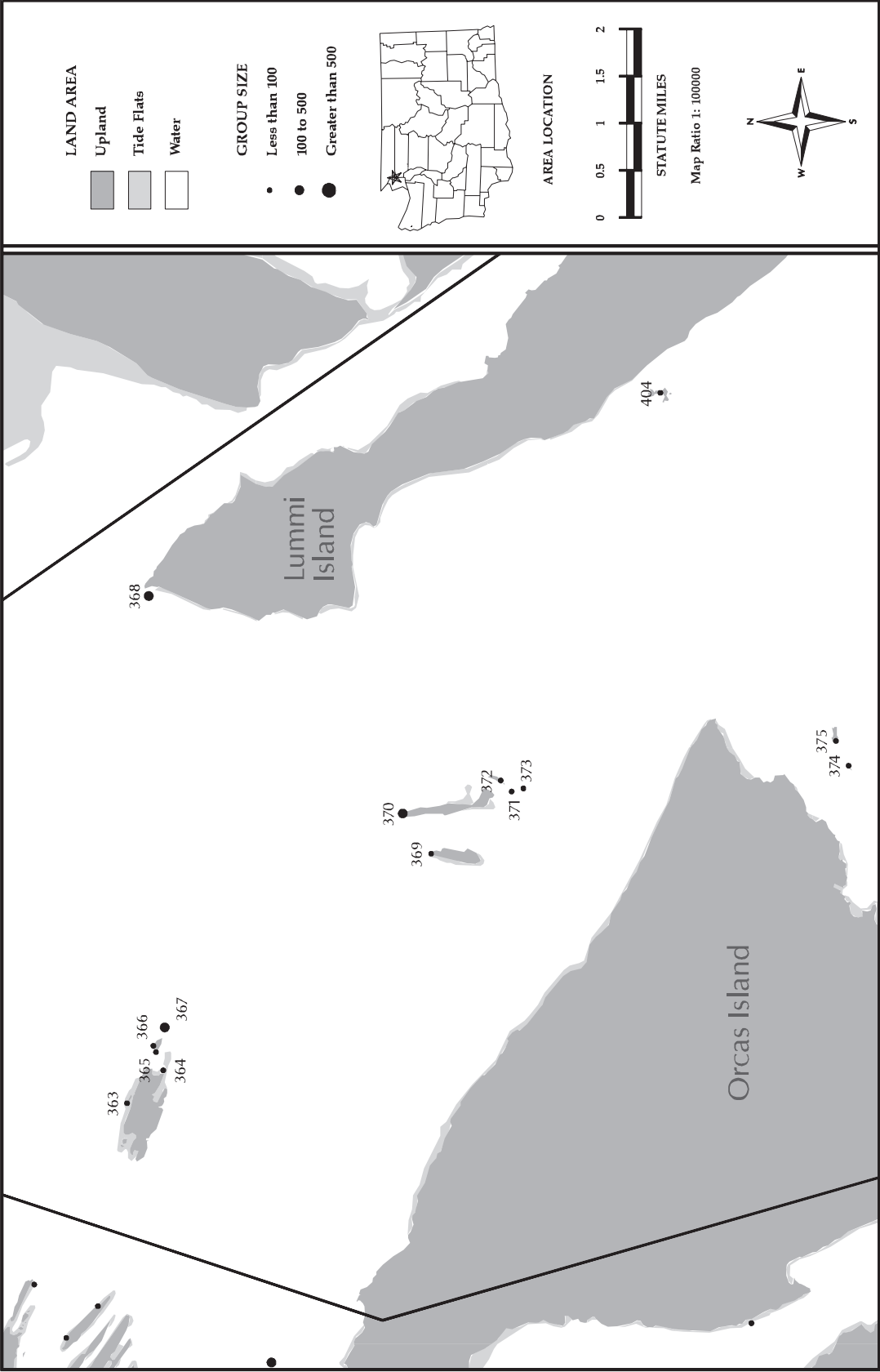


Region 11: San Juan Islands: Rosario Strait

<u>ID</u>	<u>Description</u>
363	On intertidal ledges and reef areas along north side of island.
364	On intertidal rocks and reef areas off east end of island.
365	On intertidal rocks and reef area on west end of Puffin Island.
366	On intertidal ledges on north side of Puffin Island. Nursery area.
367	On reef area just east of Puffin Island. Nursery area.
368	On rocks and reef area off Point Migley.
369	On intertidal rocks and reef areas on north end of island.
370	On intertidal rocks and reef areas on north end of island.
371	On intertidal rocks and reef areas off southeast end of Barnes Island.
372	On intertidal area around The Sisters Rock (USFWS ID 47).
373	On intertidal area around Little Sister Rock (USFWS ID 48).
374	On intertidal rocks and reef areas around Middle Peapod Rock (USFWS ID 63).
375	On intertidal rocks and reef areas around North Peapod Rock (USFWS ID 64).
376	On intertidal rocks and reef areas around South Peapod Rock (USFWS ID 62).
377	On intertidal rocks and reef area at Boulder Reef
378	On intertidal reef area at Buckeye Shoal.
379	On intertidal rocks and shoals at Cypress Reef.
380	On intertidal areas around Cone Islands.
381	On intertidal rocks and reef areas on southeast end of island.
382	On intertidal rocks and reef areas around Viti Island (USFWS ID 66).
383	On intertidal rocks and reef areas around Black Rock.
384	On intertidal rocks and reef areas around Pointer Island (USFWS ID 57).
385	On intertidal rocks and reef areas around Lawson Rock (USFWS ID 56).
386	On intertidal areas around Belle Rock.
387	On intertidal rocks and reef areas around south Bird Rocks (USFWS ID 80).
388	On intertidal rocks and reef areas around middle Bird Rocks (USFWS ID 80).
389	On intertidal rocks and reef areas around north Bird Rocks (USFWS ID 80).
390	On intertidal ledges and reef area off the northwest side of island.
391	On intertidal rocks and reef area off the northwest side of island.
392	On intertidal ledges and reef areas around Williamson Rocks (USFWS ID 81). Nursery area.
393	On scattered intertidal rocks and reef areas around Castle Rock area.
394	On intertidal ledges and rocks on south side of Colville Island USFWS ID 82).
395	Intertidal rocks and reef areas off Aleck Bay.
396	Intertidal ledges and reef areas around unnamed rock (USFWS ID 10) at entrance to Aleck Bay.
397	Intertidal ledges and reef areas around unnamed rock (USFWS ID 11) at entrance to Aleck Bay.
398	Intertidal ledges and reef areas just east of Iceberg Point.
399	Intertidal ledges and reef area east of Iceberg Point (USFWS ID 14).
400	Intertidal rocks and reef areas around unnamed rocks in bay east of Iceberg Point.
401	Intertidal rocks and reef areas around Iceberg Island.
402	On intertidal reef areas around Kellett Ledge.
403	Intertidal areas around Spindle Rock.
404	Intertidal rocks and reef areas around Lummi Rocks.
405	Intertidal rocks and reef areas off northwest side of island.

San Juan Islands

Region 11A: Rosario Strait-North



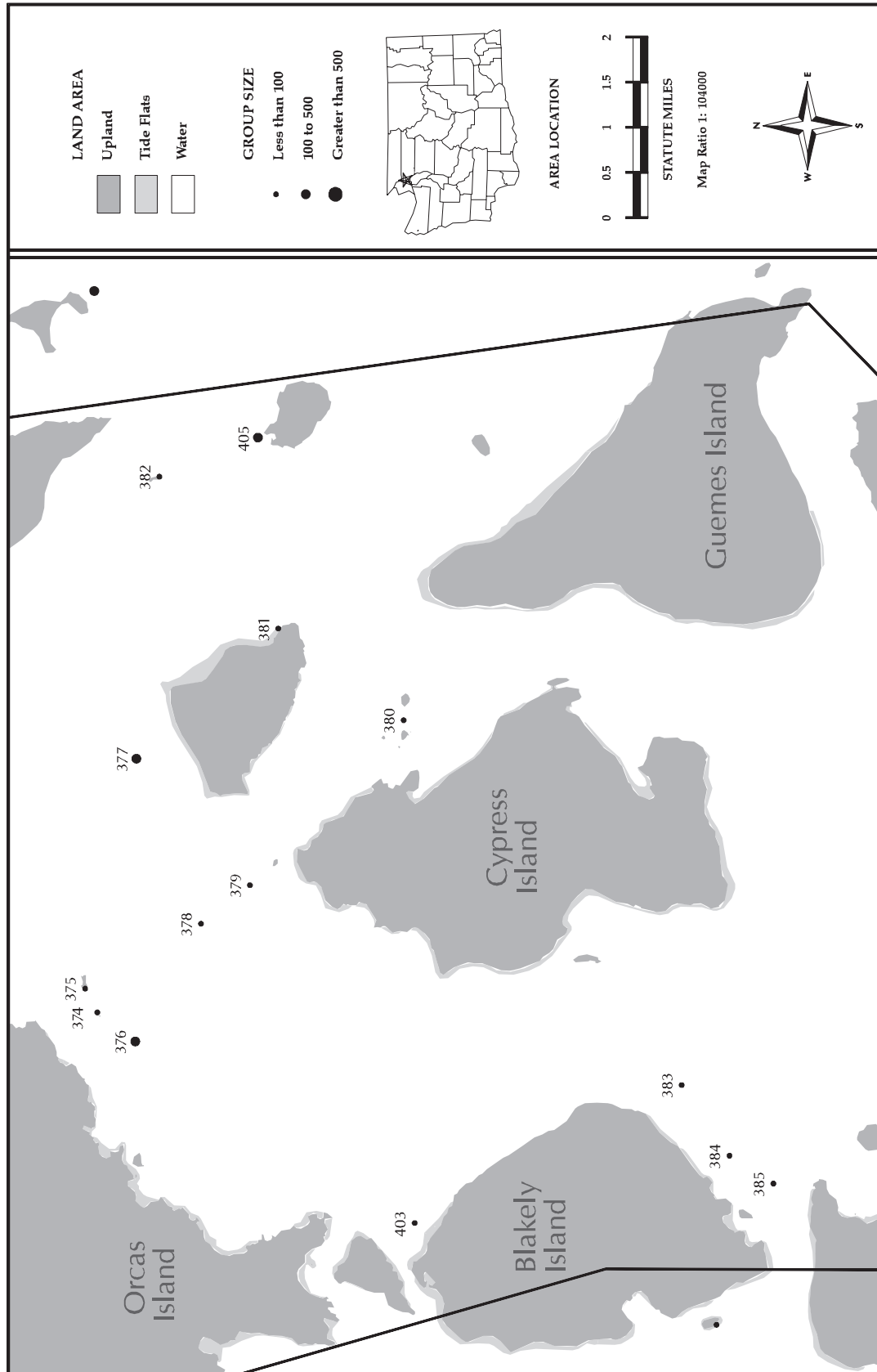
San Juan Islands
Map 11A: Rosario Strait-North

ID	Location	Latitude	Longitude	Species	Description
363	Matia Island Area	4844.96	12250.03	PV	On intertidal ledges and reef areas along north side of island.
364	Matia Island Area	4844.64	12249.55	PV	On intertidal rocks and reef areas off east end of island.
365	Puffin Island Area	4844.71	12249.30	PV	On intertidal rocks and reef area on west end of Puffin Island.
366	Puffin Island Area	4844.74	12249.22	PV	On intertidal ledges on north side of Puffin Island. Nursery area.
367	Reef East of Puffin Island	4844.64	12248.95	PV	On reef area just east of Puffin Island. Nursery area.
368	Lummi Island/Pt Migley	4844.90	12242.96	PV	On rocks and reef area off Point Migley.
369	Barnes Island	4842.23	12246.43	PV	On intertidal rocks and reef areas on north end of island.
370	Clark Island	4842.50	12245.88	PV	On intertidal rocks and reef areas on north end of island.
371	The Sisters Area	4841.51	12245.53	PV	On intertidal rocks and reef areas off southeast end of Barnes Island.
372	The Sisters Area	4841.61	12245.38	PV	On intertidal area around The Sisters Rock (USFWS ID 47).
373	Little Sister	4841.40	12245.49	PV	On intertidal area around Little Sister Rock (USFWS ID 48).
374	Middle Peapod Rock	4838.41	12245.04	PV	On intertidal rocks and reef areas around Middle Peapod Rock (USFWS ID 63).
375	North Peapod Rock	4838.53	12244.71	PV	On intertidal rocks and reef areas around North Peapod Rock (USFWS ID 64).
404	Lummi Rocks	4840.24	12239.94	PV	Intertidal rocks and reef areas around Lummi Rocks.



San Juan Islands

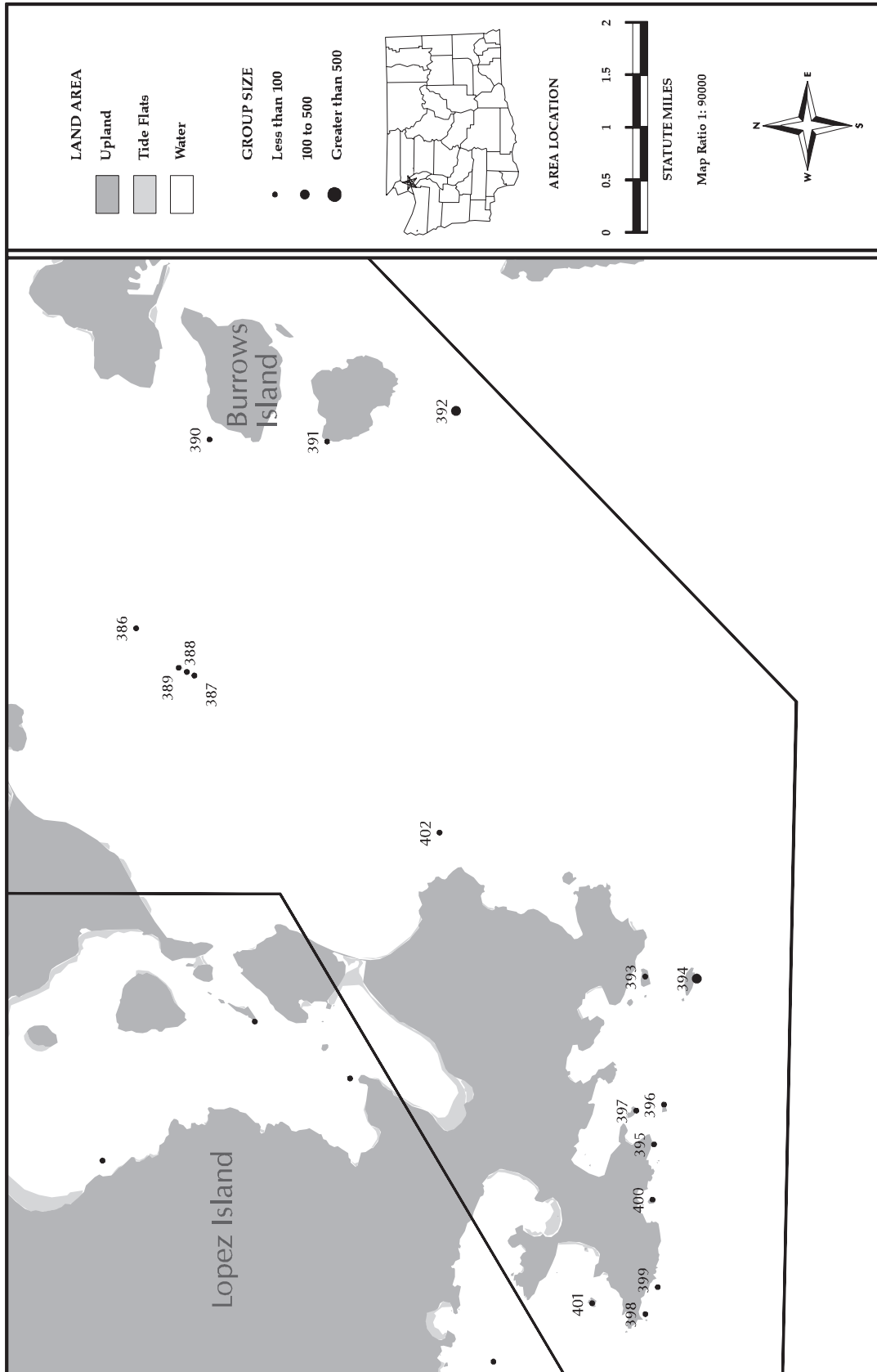
Map 11B: Rosario Strait-Central



San Juan Islands
Map 11B: Rosario Strait-Central

<u>ID</u>	<u>Location</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Species</u>	<u>Description</u>
374	Middle Peapod Rock	4838.41	12245.04	PV	On intertidal rocks and reef areas around Middle Peapod Rock (USFWS ID 63).
375	North Peapod Rock	4838.53	12244.71	PV	On intertidal rocks and reef areas around North Peapod Rock (USFWS ID 64).
376	South Peapod Rock	4838.04	12245.45	PV	On intertidal rocks and reef areas around South Peapod Rock (USFWS ID 62).
377	Boulder Reef Area	4838.11	12241.35	PV	On intertidal rocks and reef area at Boulder Reef.
378	Buckeye Shoal	4837.44	12243.72	PV	On intertidal reef area at Buckeye Shoal.
379	Cypress Reef	4836.98	12243.14	PV	On intertidal rocks and shoals at Cypress Reef.
380	Cone Island	4835.54	12240.69	PV	On intertidal areas around Cone Islands.
381	Sinclair Island, SE	4836.77	12239.41	PV	On intertidal rocks and reef areas on southeast end of island.
382	Viti Island	4837.96	12237.26	PV	On intertidal rocks and reef areas around Viti Island (USFWS ID 66).
383	Black Rock	4832.78	12245.85	PV	On intertidal rocks and reef areas around Black Rock.
384	Pointer Island	4832.30	12246.85	PV	On intertidal rocks and reef areas around Pointer Island (USFWS ID 57).
385	Lawson Rock	4831.87	12247.24	PV	On intertidal rocks and reef areas around Lawson Rock (USFWS ID 56).
403	Spindle Rock/N Blakely Is	4835.30	12247.96	PV	Intertidal areas around Spindle Rock.
405	Vendovi Island	4837.02	12236.66	PV	Intertidal rocks and reef areas off northwest side of island.

San Juan Islands Region 11C: Rosario Strait-South



San Juan Islands

Map 11C: Rosario Strait-South

ID	Location	Latitude	Longitude	Species	Description
386	Belle Rock	48 29.59	122 45.09	PV	On intertidal areas around Belle Rock
387	Bird Rocks	48 29.10	122 45.65	PV	On intertidal rocks and reef areas around south Bird Rocks (USFWS ID 80).
388	Bird Rocks	48 29.16	122 45.61	PV	On intertidal rocks and reef areas around middle Bird Rocks (USFWS ID 80).
389	Bird Rocks	48 29.23	122 45.56	PV	On intertidal rocks and reef areas around north Bird Rocks (USFWS ID 80).
390	Burrows Island/West Side	48 29.03	122 42.72	PV	On intertidal ledges and reef area off the north west side of island.
391	Allan Island/NW End	48 28.06	122 42.70	PV	On intertidal rocks and reef area off the north west side of island.
392	Williamson Rocks	48 26.99	122 42.28	PV	On intertidal ledges and reef areas around Williamson Rocks (USFWS ID 81). Nursery area.
393	Castle Rock Area	48 25.30	122 49.23	PV	On scattered intertidal rocks and reef areas around Castle Rock area.
394	Colville Island	48 24.87	122 49.24	PV	On intertidal ledges and rocks on south side of Colville Island USFWS ID 82).
395	Aleck Bay Area	48 25.18	122 51.31	PV	Intertidal rocks and reef areas off Aleck Bay.
396	Aleck Bay Area	48 25.11	122 50.81	PV	Intertidal ledges and reef areas around unnamed rock (USFWS ID 10) at entrance to Aleck Bay.
397	Aleck Bay Area	48 25.34	122 50.90	PV	Intertidal ledges and reef areas around unnamed rock (USFWS ID 11) at entrance to Aleck Bay.
398	Iceberg Point	48 25.21	122 53.42	PV	Intertidal ledges and reef areas just east of Iceberg Point.
399	Iceberg Point	48 25.12	122 53.08	PV	Intertidal ledges and reef area east of Iceberg Point (USFWS ID 14).
400	Iceberg Point	48 25.18	122 52.00	PV	Intertidal rocks and reef areas around unnamed rocks in bay east of Iceberg Point.
401	Iceberg Island	48 25.66	122 53.30	PV	Intertidal rocks and reef areas around Iceberg Island.
402	Kellett Ledge	48 27.03	122 47.52	PV	On intertidal reef areas around Kellett Ledge.



Region 12: San Juan Islands- San Juan Channel

Use NOAA Charts 18421 (Strait of Juan de Fuca and Strait of Georgia/Drayton Harbor), 18434 (San Juan Channel), 18432 (Boundary Pass) for navigation and bathymetry details.

Numerous harbor seal haulout sites are located on intertidal rocks, reefs, and islands in this region. Peak counts occur during the pupping season (mid-June through August) and annual molt (mid-August through October). Small numbers of sea lions may occasionally use navigation buoys.

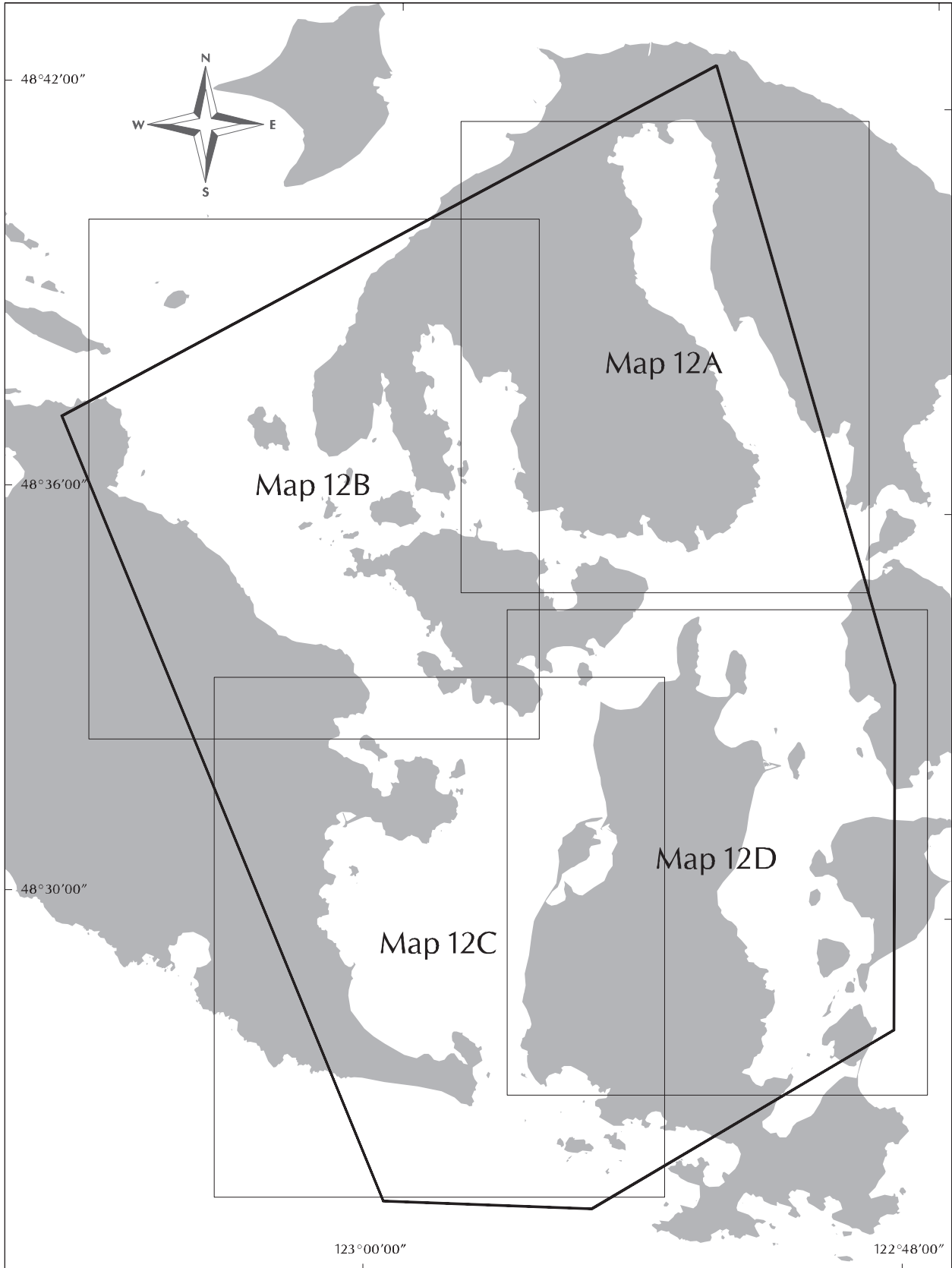


Harbor seals hauled out on Whale Rock at low tide, August 13, 1996.



San Juan Islands

Region 12: San Juan Channel



Region 12: San Juan Islands: San Juan Channel

<u>ID</u>	<u>Location</u>	<u>Survey</u>		<u>Longitude</u>	<u>Species</u>	<u>Count</u>	<u>Use</u>
		<u>Code</u>	<u>Latitude</u>				
406	Hall Island Area	12.01	4826.12	122 54.65	PV	<100	LOW
407	Rock NW of Hall Island	12.02	4826.16	122 54.81	PV	<100	LOW
408	Secar Rock	12.03	4826.29	122 54.33	PV	<100	LOW
409	Rocks E of Charles Island	12.04	4826.45	122 54.07	PV	<100	LOW
410	SE of Long Island	12.05	4826.32	122 54.98	PV	<100	LOW
411	Reef S of Long Island	12.06	4826.27	122 55.52	PV	<100	LOW
412	SW of Long Island	12.07	4826.35	122 55.84	PV	<100	LOW
413	N of Long Island	12.08	4826.62	122 55.30	PV	<100	LOW
414	Mummy Rock	12.09	4826.99	122 55.73	PV	<100	LOW
415	Whale Rock	12.10	4826.84	122 56.46	PV	<100	LOW
416	Buck Island	12.11	4827.14	122 55.21	PV	<100	LOW
417	Rocks off Davis Point	12.12	4827.35	122 55.85	PV	<100	LOW
418	Deadman Island	12.13	4827.54	122 56.51	PV	<100	LOW
419	Goose Island	12.14	4827.53	122 57.37	PV	100-500	LOW
420	Shark Reef	12.15	4828.58	122 56.77	PV	<100	LOW
421	Harbor Rock	12.16	4828.21	122 58.16	PV	<100	LOW
422	North Pacific Rock	12.17	4828.29	122 59.75	PV	<100	LOW
423	Halftide Rocks	12.18	4828.73	122 59.93	PV	<100	LOW
424	Low Point	12.19	4829.09	123 00.40	PV	<100	LOW
425	Reef S of Dinner Island	12.20	4830.30	123 00.41	PV	100-500	LOW
426	NW of Dinner Island (N Bay)	12.21	4830.59	123 00.99	PV	<100	LOW
427	Pear Point Area	12.22	4830.89	122 58.82	PV	<100	LOW
428	Pear Point Area	12.22	4830.83	122 58.94	PV	<100	LOW
429	Pear Point Area	12.22	4831.08	122 58.58	PV	<100	LOW
430	Danger Rock/NE of Pear Point	12.23	4831.26	122 58.16	PV	<100	LOW
431	Reef Point	12.24	4831.70	122 58.00	PV	<100	LOW
432	Rock in Hicks Bay	12.25	4833.10	122 58.07	PV	<100	LOW
433	Rocks NE of Point George	12.26	4833.99	122 59.01	PV	<100	LOW
434	Tift Rocks, S of Neck Point	12.27	4834.71	122 59.84	PV	<100	LOW
435	E Of Neck Point, Shaw Island	12.28	4835.22	123 00.38	PV	<100	LOW
436	Bell Island/E of Crane Island	12.29	4835.77	122 58.76	PV	<100	LOW
437	Reef W of Cliff Island	12.30	4835.33	123 01.13	PV	<100	LOW
438	Nob Island	12.31	4835.47	123 01.04	PV	<100	LOW
439	Bird Rock/W of Crane Island	12.32	4835.90	123 00.82	PV	<100	LOW
440	Reef Island	12.33	4836.31	123 00.97	PV	<100	LOW
441	Rock W of Yellow Island	12.34	4835.46	123 01.97	PV	100-500	LOW
442	Rocky Bay	12.35	4836.05	123 05.87	PV	<100	LOW
443	Rocks SW of O'Neil Island	12.36	4836.20	123 05.53	PV	<100	LOW
444	Blind Island	12.37	4835.21	122 56.33	PV	<100	LOW
445	Blind Island	12.37	4835.12	122 56.13	PV	<100	LOW
446	S of Grindstone Harbor	12.38	4835.49	122 54.07	PV	<100	LOW
447	Shag Rock	12.39	4835.50	122 52.43	PV	<100	LOW
448	East Sound/Twin Rocks	12.40	4836.94	122 51.82	PV	<100	LOW
449	Leo Reef	12.41	4833.19	122 51.25	PV	100-500	LOW
450	Flower Island	12.42	4832.78	122 51.11	PV	<100	LOW
451	Willow Island	12.43	4832.38	122 49.30	PV	<100	LOW
452	Small Island	12.44	4829.74	122 51.71	PV	<100	LOW
453	Crab Island	12.45	4827.71	122 50.60	PV	<100	LOW
454	Ram Island	12.46	4828.51	122 49.93	PV	<100	LOW
455	McConnell Island	12.47	4835.65	123 01.30	PV	<100	LOW
456	Reef E of Jones Island	12.48	4836.74	123 02.16	PV	<100	LOW
457	East Sound/NW of Rosario	12.49	4839.16	122 52.82	PV	<100	LOW
458	East Sound/NW of Rosario	12.49	4839.42	122 54.48	PV	<100	LOW
459	Low Island	12.50	4835.36	123 01.46	PV	<100	LOW
460	Turn Rock	12.51	4832.14	122 57.79	PV	<100	LOW

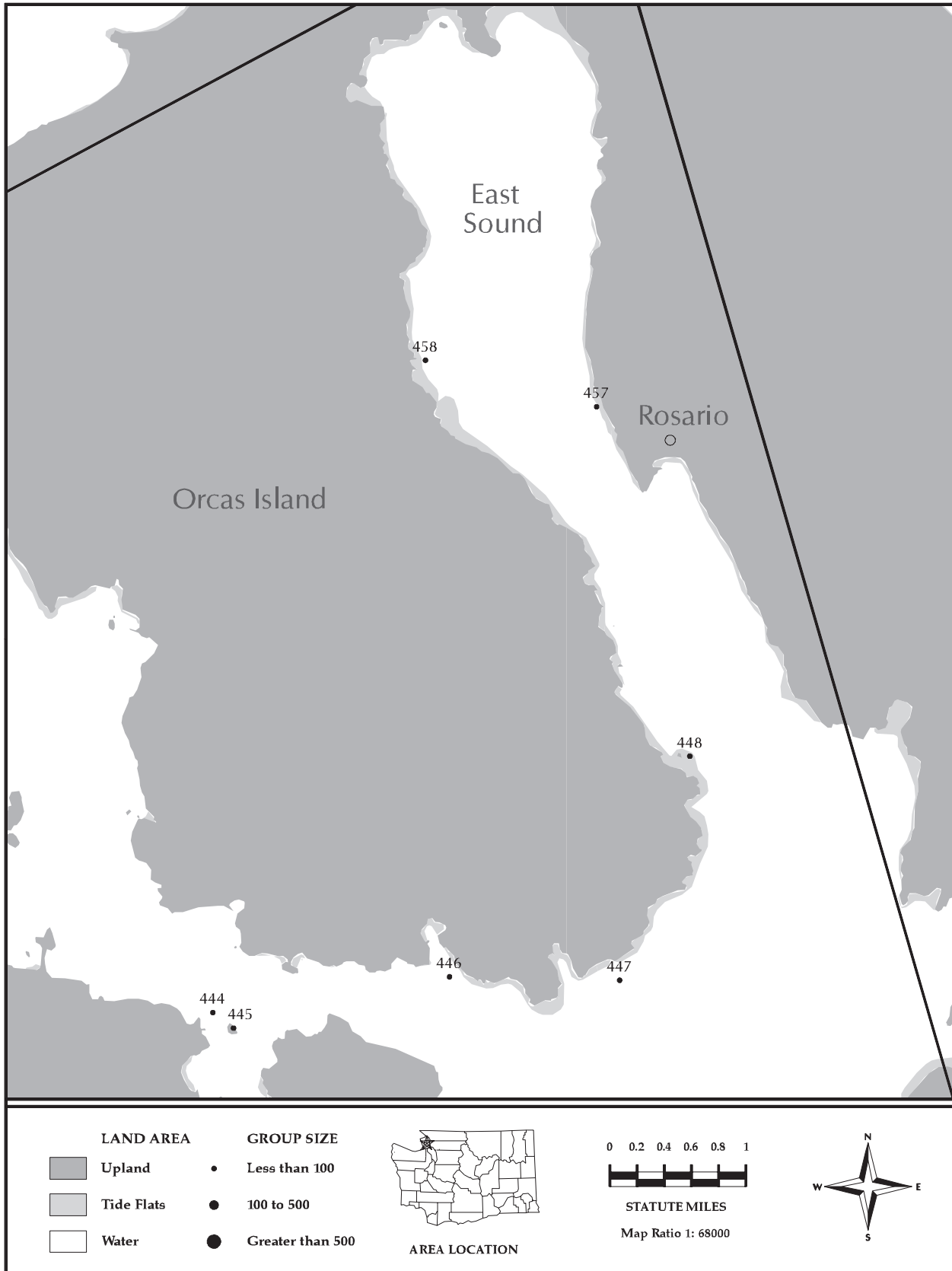


Region 12: San Juan Islands: San Juan Channel

ID	Description
406	Intertidal rocks and reefs around Hall Island (USFWS ID 15).
407	Rock (USFWS ID 16) and intertidal reef area northwest of Hall Island.
408	On intertidal areas around Secar Rock (USFWS ID 17), east of Charles Island.
409	Intertidal areas around rock (USFWS ID 18) and reef east of Charles Island.
410	Intertidal areas around rock (USFWS ID 19) southeast of Long Island.
411	Intertidal areas around reef south of Long Island.
412	Intertidal areas around rock (USFWS ID 20) southwest of Long Island.
413	Intertidal area around reef north of Long Island.
414	Intertidal area around Mummy Rocks (USFWS ID 21).
415	Intertidal areas on Whale Rock.
416	Intertidal areas on Buck Island (USFWS ID 83).
417	Intertidal areas on rocks and reef off Davis Point.
418	Intertidal areas on Deadman Island.
419	Intertidal areas around north end of Goose Island.
420	Intertidal areas on Shark Reef (USFWS ID 23).
421	Intertidal areas on Harbor Rock (USFWS ID 24).
422	Intertidal areas on North Pacific Rocks (USFWS ID 25).
423	Intertidal areas on Halftide Rocks (USFWS ID 26).
424	Intertidal areas off Low Point.
425	Intertidal reefs and rocks just south of Dinner Island (USFWS ID 74).
426	Intertidal reefs and rocks in North Bay (northwest of Dinner Island).
427	Intertidal reefs off Pear Point.
428	Intertidal reefs off Pear Point.
429	Intertidal reefs just north of Pear Point.
430	Intertidal areas around Danger Rock.
431	Intertidal rock (USFWS ID 51) and reef area off Reef Point.
432	Intertidal areas on rocks in Hicks Bay.
433	Intertidal areas on rocks northeast of Point George.
434	Intertidal areas on Tift Rocks (south of Neck Point).
435	Intertidal areas on rocks east of Neck Point.
436	Intertidal areas on Bell Island.
437	Intertidal reef area west of Cliff Island.
438	Intertidal areas on Nob Island.
439	Intertidal areas on Bird Rock (USFWS ID 68).
440	Intertidal areas on Reef Island.
441	Intertidal areas on rocks and reef west of Yellow Island (USFWS ID 69).
442	Intertidal areas on reef in west Rocky Bay.
443	Intertidal areas on O'Neil Island in Rocky Bay.
444	Intertidal areas on Blind Island.
445	Intertidal areas on rocks and reefs around Blind Island.
446	Intertidal rocks and reef south of Grindstone Harbor.
447	Intertidal areas on Shag Rock (USFWS ID 53).
448	Intertidal areas around Twin Rocks in East Sound.
449	Intertidal areas around Leo Reef.
450	Intertidal areas around Flower Island (USFWS ID 54).
451	Intertidal areas around Willow Island (USFWS ID 55).
452	Intertidal areas on Small Island (USFWS ID 1).
453	Intertidal areas on Crab Island (USFWS ID 5).
454	Intertidal areas on Ram Island.
455	Intertidal areas around McConnell Island.
456	Intertidal reef areas on east side of Jones Island.
457	Intertidal reefs and rocks in East Sound.
458	Intertidal reef areas on west side of East Sound.
459	Intertidal areas around Low Island.
460	Intertidal areas on Turn Rock.

San Juan Islands

Map 12A: San Juan Channel-East Sound



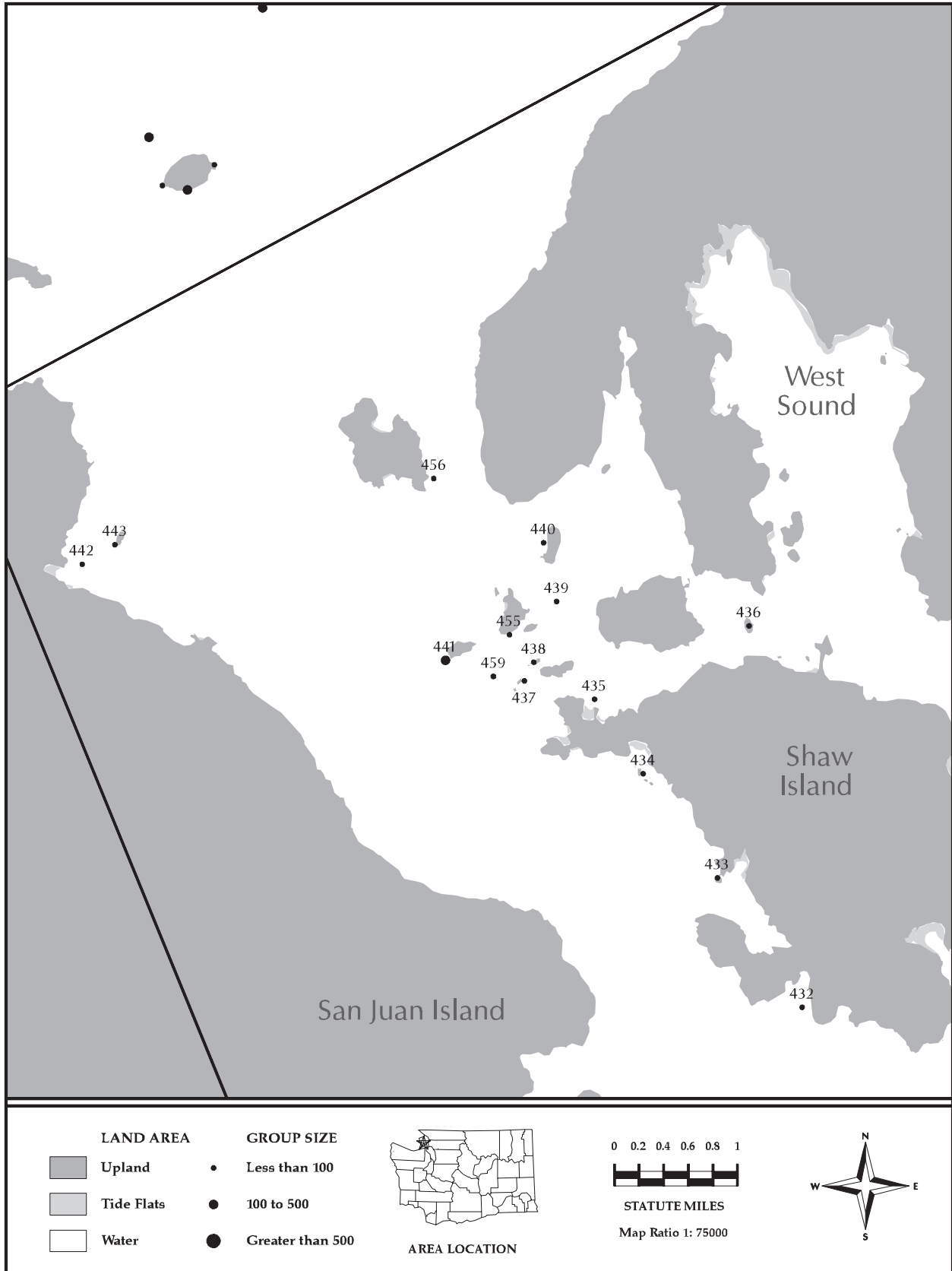
San Juan Islands

Map 12A: San Juan Channel-East Sound

ID	<u>Location</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Species</u>	<u>Description</u>
444	Blind Island	48 35.21	122 56.33	PV	Intertidal areas on Blind Island.
445	Blind Island	48 35.12	122 56.13	PV	Intertidal areas on rocks and reefs around Blind Island.
446	S of Grindstone Harbor	48 35.49	122 54.07	PV	Intertidal rocks and reef south of Grindstone Harbor.
447	Shag Rock	48 35.50	122 52.43	PV	Intertidal areas on Shag Rock (USFWS ID 53).
448	East Sound/Twin Rocks	48 36.94	122 51.82	PV	Intertidal areas around Twin Rocks in East Sound.
457	East Sound/NW of Rosario	48 39.16	122 52.82	PV	Intertidal reefs and rocks in East Sound.
458	East Sound/NW of Rosario	48 39.42	122 54.48	PV	Intertidal reef areas on west side of East Sound.

San Juan Islands

Map 12B: San Juan Channel-North



San Juan Islands

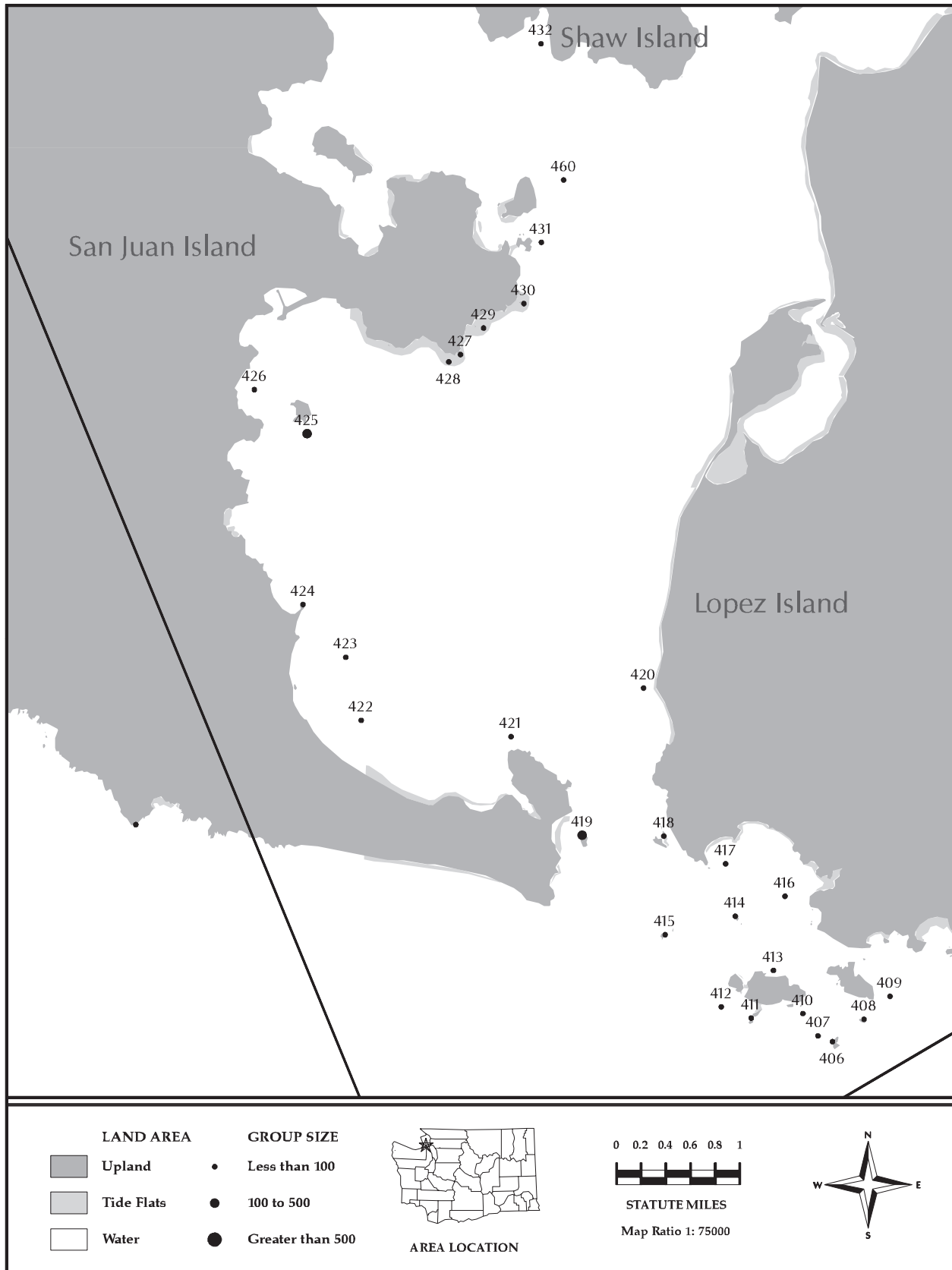
Map 12B: San Juan Channel-North

ID	Location	Latitude	Longitude	Species	Description
432	Rock in Hicks Bay	4833.10	12258.07	PV	Intertidal areas on rocks in Hicks Bay.
433	Rocks NE of Point George	4833.99	12259.01	PV	Intertidal areas on rocks northeast of Point George.
434	Tift Rocks, S of Neck Point	4834.71	12259.84	PV	Intertidal areas on Tift Rocks (south of Neck Point).
435	E Of Neck Pt, Shaw Island	4835.22	12300.38	PV	Intertidal areas on rocks east of Neck Point.
436	Bell Island/E of Crane Is	4835.77	12258.76	PV	Intertidal areas on Bell Island.
437	Reef W of Cliff Island	4835.33	12301.13	PV	Intertidal reef area west of Cliff Island.
438	Nob Island	4835.47	12301.04	PV	Intertidal areas on Nob Island.
439	Bird Rock/W of Crane Is	4835.90	12300.82	PV	Intertidal areas on Bird Rock (USFWS ID 68).
440	Reef Island	4836.31	12300.97	PV	Intertidal areas on Reef Island.
441	Rock W of Yellow Island	4835.46	12301.97	PV	Intertidal areas on rocks and reef west of Yellow Island (USFWS ID 69).
442	Rocky Bay	4836.05	12305.87	PV	Intertidal areas on reef in west Rocky Bay.
443	Rocks SW of O'Neil Island	4836.20	12305.53	PV	Intertidal areas on O'Neil Island in Rocky Bay.
455	McConnell Island	4835.65	12301.30	PV	Intertidal areas around McConnell Island.
456	Reef E of Jones Island	4836.74	12302.16	PV	Intertidal reef areas on east side of Jones Island.
459	Low Island	4835.36	12301.46	PV	Intertidal areas around Low Island.



San Juan Islands

Map 12C: San Juan Channel-South



San Juan Islands

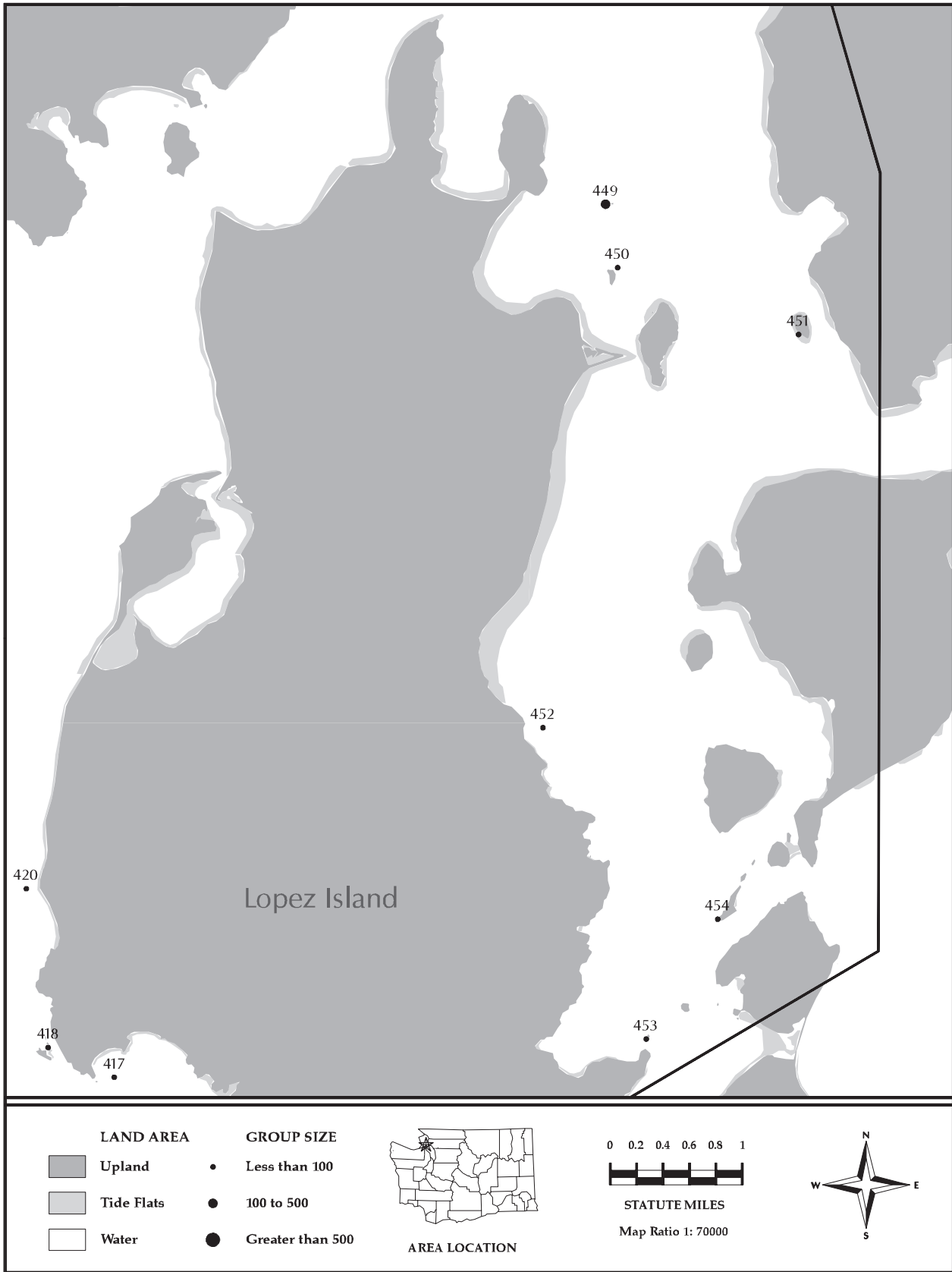
Map 12C: San Juan Channel-South

ID	Location	Latitude	Longitude	Species	Description
406	Hall Island Area	48 26.12	122 54.65	PV	Intertidal rocks and reefs around Hall Island (USFWS ID 15).
407	Rock NW of Hall Is.	48 26.16	122 54.81	PV	Rock (USFWS ID 16) and intertidal reef area north west of Hall Island.
408	Secar Rock	48 26.29	122 54.33	PV	On intertidal areas around Secar Rock (USFWS ID 17), east of Charles Island.
409	Rocks E of Charles Is.	48 26.45	122 54.07	PV	Intertidal areas around rock (USFWS ID 18) and reef east of Charles Island.
410	SE of Long Island	48 26.32	122 54.98	PV	Intertidal areas around rock (USFWS ID 19) south east of Long Island.
411	Reef S of Long Is.	48 26.27	122 55.52	PV	Intertidal areas around reef south of Long Island.
412	SW of Long Island	48 26.35	122 55.84	PV	Intertidal areas around rock (USFWS ID 20) south west of Long Island.
413	N of Long Island	48 26.62	122 55.30	PV	Intertidal area around reef north of Long Island.
414	Mummy Rock	48 26.99	122 55.73	PV	Intertidal area around Mummy Rocks (USFWS ID 21).
415	Whale Rock	48 26.84	122 56.46	PV	Intertidal areas on Whale Rock.
416	Buck Island	48 27.14	122 55.21	PV	Intertidal areas on Buck Island (USFWS ID 83).
417	Rocks off Davis Point	48 27.35	122 55.85	PV	Intertidal areas on rocks and reef off Davis Point.
418	Deadman Island	48 27.54	122 56.51	PV	Intertidal areas on Deadman Island.
419	Goose Island	48 27.53	122 57.37	PV	Intertidal areas around north end of Goose Island.
420	Shark Reef	48 28.58	122 56.77	PV	Intertidal areas on Shark Reef (USFWS ID 23).
421	Harbor Rock	48 28.21	122 58.16	PV	Intertidal areas on Harbor Rock (USFWS ID 24).
422	North Pacific Rock	48 28.29	122 59.75	PV	Intertidal areas on North Pacific Rocks (USFWS ID 25).
423	Halftide Rocks	48 28.73	122 59.93	PV	Intertidal areas on Halftide Rocks (USFWS ID 26).
424	Low Point	48 29.09	123 00.40	PV	Intertidal areas off Low Point.
425	Reef S of Dinner Is.	48 30.30	123 00.41	PV	Intertidal reefs and rocks just south of Dinner Island (USFWS ID 74).
426	NW of Dinner Is. (N Bay)	48 30.59	123 00.99	PV	Intertidal reefs and rocks in North Bay (northwest of Dinner Island).
427	Pear Point Area	48 30.89	122 58.82	PV	Intertidal reefs off Pear Point.
428	Pear Point Area	48 30.83	122 58.94	PV	Intertidal reefs off Pear Point.
429	Pear Point Area	48 31.08	122 58.58	PV	Intertidal reefs just north of Pear Point.
430	Danger Rk/NE of Pear Pt	48 31.26	122 58.16	PV	Intertidal areas around Danger Rock.
431	Reef Point	48 31.70	122 58.00	PV	Intertidal rock (USFWS ID 51) and reef area off Reef Point.
432	Rock in Hicks Bay	48 33.10	122 58.07	PV	Intertidal areas on rocks in Hicks Bay.
460	Turn Rock	48 32.14	122 57.79	PV	Intertidal areas on Turn Rock.



San Juan Islands

Map 12D: San Juan Channel-Lopez Sound



San Juan Islands

Map 12D: San Juan Channel-Lopez Sound

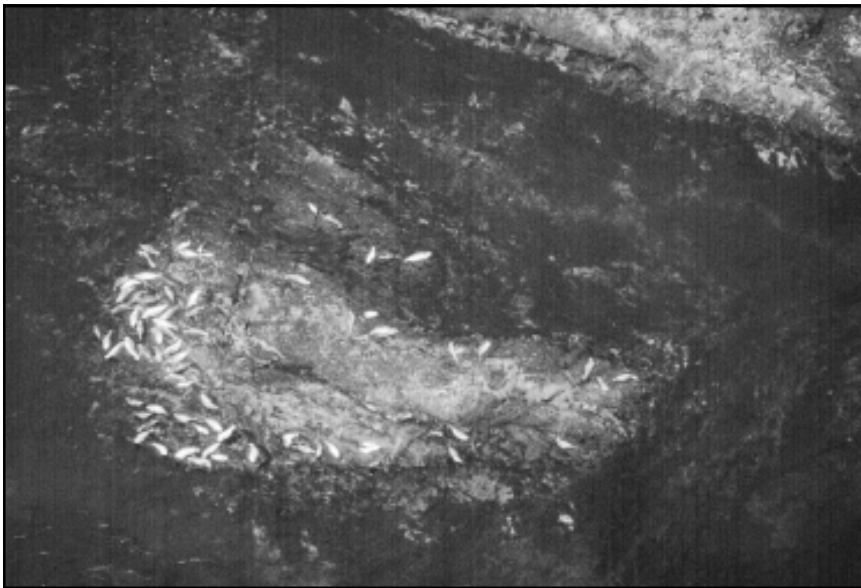
ID	Location	Latitude	Longitude	Species	Description
417	Rocks off Davis Point	48 27.35	122 55.85	PV	Intertidal areas on rocks and reef off Davis Point.
418	Deadman Island	48 27.54	122 56.51	PV	Intertidal areas on Deadman Island.
420	Shark Reef	48 28.58	122 56.77	PV	Intertidal areas on Shark Reef (USFWS ID 23).
449	Leo Reef	48 33.19	122 51.25	PV	Intertidal areas around Leo Reef.
450	Flower Island	48 32.78	122 51.11	PV	Intertidal areas around Flower Island (USFWS ID 54).
451	Willow Island	48 32.38	122 49.30	PV	Intertidal areas around Willow Island (USFWS ID 55).
452	Small Island	48 29.74	122 51.71	PV	Intertidal areas on Small Island (USFWS ID 1).
453	Crab Island	48 27.71	122 50.60	PV	Intertidal areas on Crab Island (USFWS ID 5).
454	Ram Island	48 28.51	122 49.93	PV	Intertidal areas on Ram Island.



Region 13: San Juan Islands: Haro Strait

Use NOAA Charts 18421 (Strait of Juan de Fuca and Strait of Georgia/Drayton Harbor), 18431 (Rosario Strait-northern part), and 18432 (Boundary Pass) 18433 (Haro Strait Middle Bank to Stuart Island) and 18434 (San Juan Channel) for navigation and bathymetry details.

Numerous harbor seal haulout sites are located on intertidal rocks, reefs and islands in this region. Peak counts occur during the pupping season (mid-June through August) and annual molt (mid-August through October). Small numbers of sea lions may occasionally use navigation buoys.

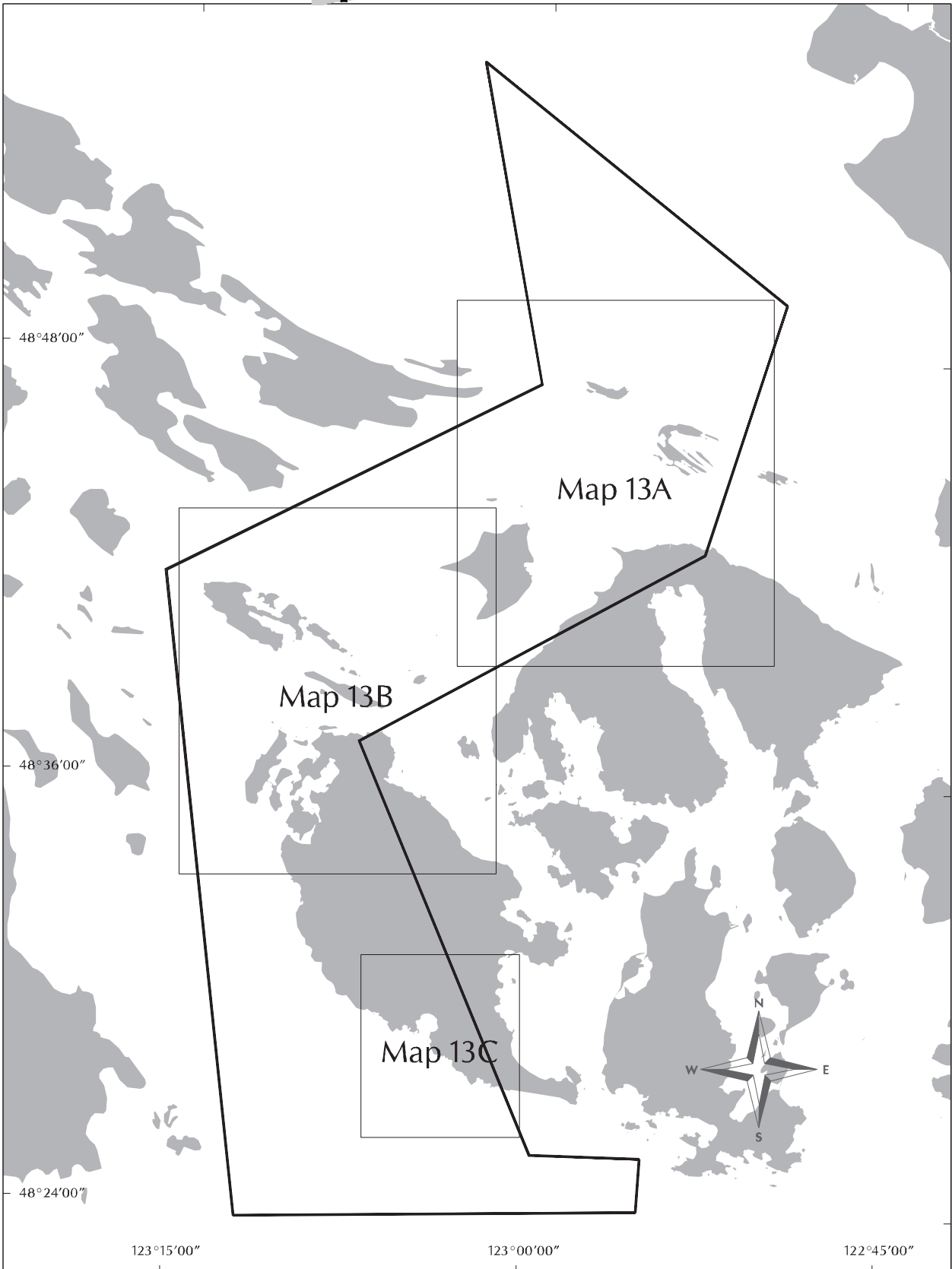


Harbor seals hauled out on Gull Reef at low tide, August 2, 1996.



San Juan Islands

Map 13: Haro Strait



Region 13: San Juan Islands: Haro Strait

<u>ID</u>	<u>Location</u>	<u>Survey Code</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Species</u>	<u>Count</u>	<u>Use</u>
461	Sucia Island Area	13.01	48 46.25	122 54.09	PV	<100	LOW
462	Sucia Island Area	13.01	48 45.37	122 55.13	PV	<100	LOW
463	Echo Bay, Ewing Island	13.02	48 45.77	122 52.58	PV	<100	LOW
464	Echo Bay, Finger Islands	13.03	48 45.46	122 53.32	PV	<100	LOW
465	Echo Bay, Finger Islands	13.03	48 45.17	122 52.86	PV	<100	LOW
466	Clements Reef	13.04	48 46.55	122 53.21	PV	100-500	LOW
467	Reef SE of Clements	13.05	48 46.19	122 52.64	PV	100-500	LOW
468	Parker Reef	13.06	48 43.56	122 53.57	PV	100-500	LOW
469	Patos Island	13.07	48 47.34	122 58.09	PV	<100	LOW
470	Bare Island	13.08	48 43.79	123 0.79	PV	<100	LOW
471	Reef E of Skipjack Is.	13.09	48 43.83	123 1.22	PV	100-500	LOW
472	Skipjack Island	13.11	48 43.98	123 2.26	PV	<100	LOW
473	Skipjack Island	13.11	48 44.00	123 2.04	PV	100-500	LOW
474	Reef E of Skipjack	13.11	48 43.99	123 1.70	PV	<100	LOW
475	White Rock Area	13.12	48 40.27	123 4.43	PV	<100	LOW
476	White Rock Area	13.12	48 40.18	123 4.31	PV	100-500	LOW
477	White Rock Area	13.12	48 40.01	123 4.15	PV	100-500	LOW
478	White Rock Area	13.12	48 40.09	123 4.21	PV	<100	LOW
479	Flattop Island	13.13	48 38.74	123 5.15	PV	<100	LOW
480	Flattop Island	13.13	48 38.89	123 4.60	PV	<100	LOW
481	Flattop Island	13.13	48 38.71	123 4.88	PV	100-500	LOW
482	Gull Rock	13.14	48 39.07	123 5.31	PV	100-500	LOW
483	Stuart Is./Reid Harbor	13.15	48 39.80	123 10.04	PV	<100	LOW
484	Satellite Is./Prevost Harbor	13.16	48 40.68	123 11.00	PV	<100	LOW
485	Ripple Island	13.17	48 39.38	123 7.79	PV	100-500	LOW
486	Gull Reef	13.18	48 39.29	123 8.72	PV	<100	LOW
487	Shag Reef	13.19	48 39.26	123 7.92	PV	<100	LOW
488	Little Cactus Island	13.20	48 39.02	123 8.05	PV	<100	LOW
489	Cactus Island Area	13.21	48 38.89	123 7.67	PV	<100	LOW
490	Cactus Island Area	13.21	48 38.90	123 7.51	PV	<100	LOW
491	Rocks SE of Cactus	13.22	48 38.89	123 7.43	PV	<100	LOW
492	Rf Betw Gull Rf & Cactus	13.23	48 39.22	123 8.50	PV	<100	LOW
493	Sentinel Island	13.24	48 38.41	123 9.07	PV	<100	LOW
494	Sentinel Rock	13.25	48 38.41	123 9.35	PV	100-500	LOW
495	Posey Is, Reef N of Pearl	13.26	48 37.12	123 9.97	PV	<100	LOW
496	Barren Island	13.27	48 37.39	123 9.58	PV	<100	LOW
497	Battleship Island	13.28	48 37.46	123 11.01	PV	100-500	LOW
498	Rocks off Mcracken Pt	13.29	48 37.19	123 10.82	PV	<100	LOW
499	So Henry Island Area	13.30	48 34.94	123 10.19	PV	<100	LOW
500	So Henry Island Area	13.30	48 35.01	123 10.76	PV	<100	LOW
501	Mosquito Pass Area	13.31	48 35.86	123 10.15	PV	<100	LOW
502	False Bay Area	13.32	48 28.87	123 4.58	PV	<100	LOW
503	Freeman Island	13.33	48 41.97	122 57.04	PV	<100	LOW
504	Speiden Island	13.34	48 38.48	123 8.56	PV	<100	LOW
505	Speiden Island	13.34	48 38.37	123 8.31	PV	<100	LOW
506	Speiden Island	13.34	48 38.31	123 8.15	PV	<100	LOW
507	Eagle Point Area	13.35	48 27.50	123 2.09	PV	<100	LOW
508	Pt. Doughty	13.36	48 42.74	122 56.98	PV	<100	LOW

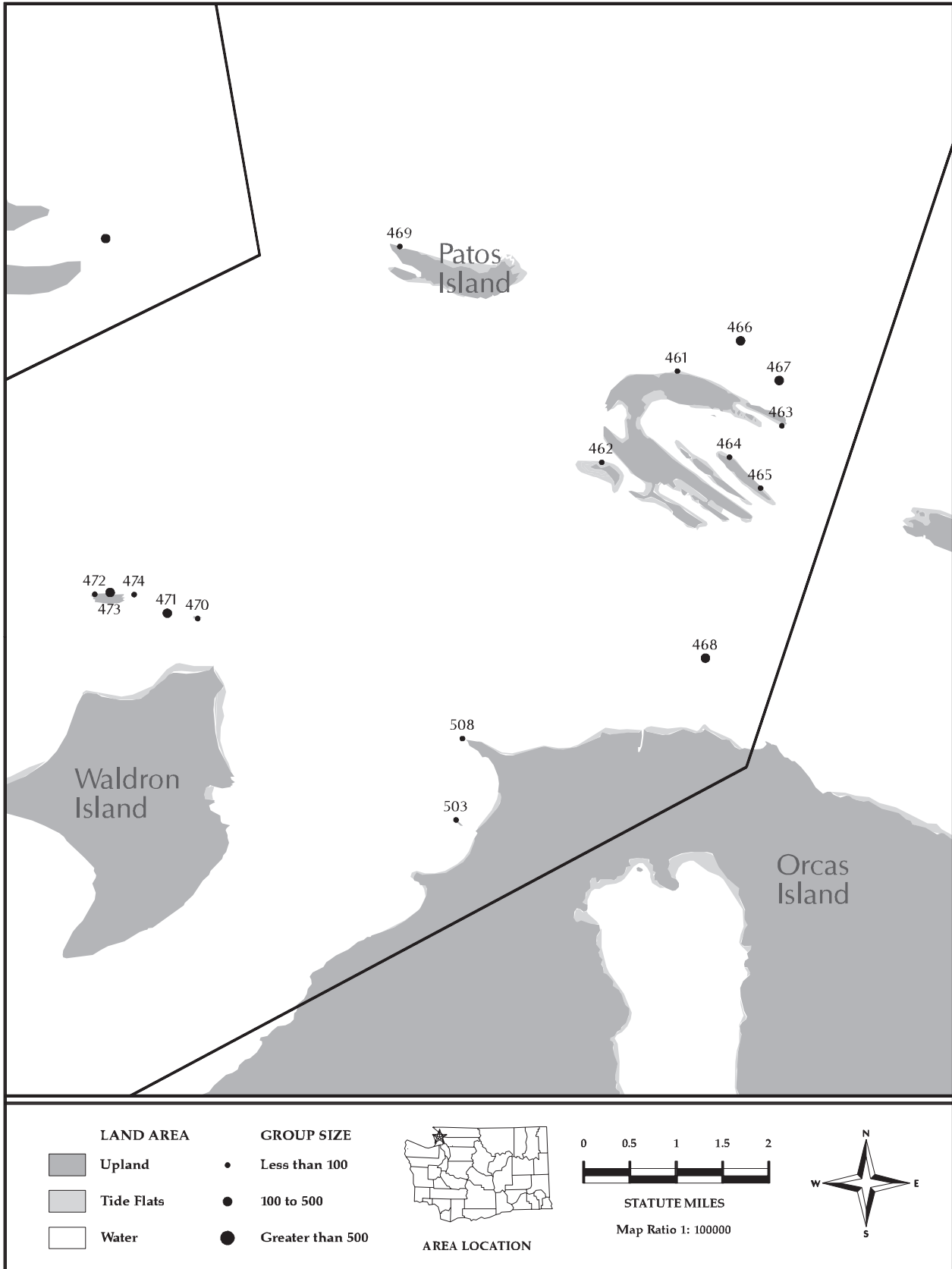


Region 13: San Juan Islands: Haro Strait

<u>ID</u>	<u>Description</u>
461	Intertidal ledges along north side of island.
462	Intertidal rocks off southwest side of island.
463	Intertidal areas during pupping season.
464	Intertidal ledges along north side of island.
465	Intertidal ledges along south east side of island.
466	Intertidal areas on reef (USFWS ID 44).
467	Intertidal areas on reef (USFWS ID 45) south east of Clements Reef.
468	Intertidal areas on reef (USFWS ID 46).
469	Intertidal ledges and reef areas on north side.
470	Intertidal ledges around Bare Island (USFWS ID 84).
471	Intertidal reef area between Bare and Skipjack Islands.
472	Intertidal ledges on northwest side of island (USFWS ID 42).
473	Intertidal ledges on northeast side of island (USFWS ID 42).
474	Intertidal ledges and reef area around unnamed rock (USFWS ID 43) east of the Skipjack Island.
475	Intertidal areas on the north White Rock (USFWS ID 40).
476	Intertidal areas on the middle White Rock (USFWS ID 40).
477	Intertidal areas on the south White Rock (USFWS ID 40).
478	Intertidal areas on the reef off the south end of White Rock.
479	Intertidal areas on west end of Flattop Island (USFWS ID 39).
480	Intertidal areas on east end of island.
481	Intertidal ledges and reef on south side of island.
482	Intertidal areas around rock (USFWS ID 38).
483	Intertidal ledges and reefs around entrance into Reid Harbor.
484	Intertidal ledges and reef areas around Satellite Island in Prevost Harbor.
485	Intertidal areas around island (USFWS ID 35).
486	Intertidal rocks and reef areas around Gull Reef (USFWS ID 34).
487	Intertidal areas around Shag Reef (USFWS ID 36).
488	Intertidal ledges and rocks around Little Cactus Island (USFWS ID 37).
489	Intertidal ledges and reef areas on south side of Cactus Island.
490	Intertidal ledges and reef areas on east end of Cactus Island.
491	Intertidal rocks and reef areas off southeast end of Cactus Island.
492	Intertidal rocks and reef areas between Gull Reef and Little Cactus Island.
493	Intertidal ledges around Sentinel Island.
494	Intertidal rocks and reef areas around Sentinel Rock (USFWS ID 32).
495	Intertidal rocks and reef areas on north side of Pearl Island.
496	Intertidal rocks and reef areas around Barren Island (USFWS ID 30).
497	Intertidal ledges and reef areas around Battleship Island (USFWS ID 31).
498	Intertidal rocks and reef areas southwest of McCracken Point.
499	Intertidal rocks and reef areas around south entrance to Mosquito Pass.
500	Intertidal rocks and reef areas off southeast end of Henry Island.
501	Intertidal rocks and reef areas along Mosquito Pass.
502	Intertidal rocks and reef area on unnamed rock (USFWS ID 27) off False Bay.
503	Intertidal ledges and reef areas around Freeman Island.
504	Intertidal ledges on south side of Speiden Island.
505	Intertidal ledges on south side of Speiden Island.
506	Intertidal ledges on south side of Speiden Island.
507	Intertidal rocks and reef areas off Eagle Point.
508	Intertidal ledges and rocks along south side of Point Doughty.

San Juan Islands

Map 13A: Haro Strait-North



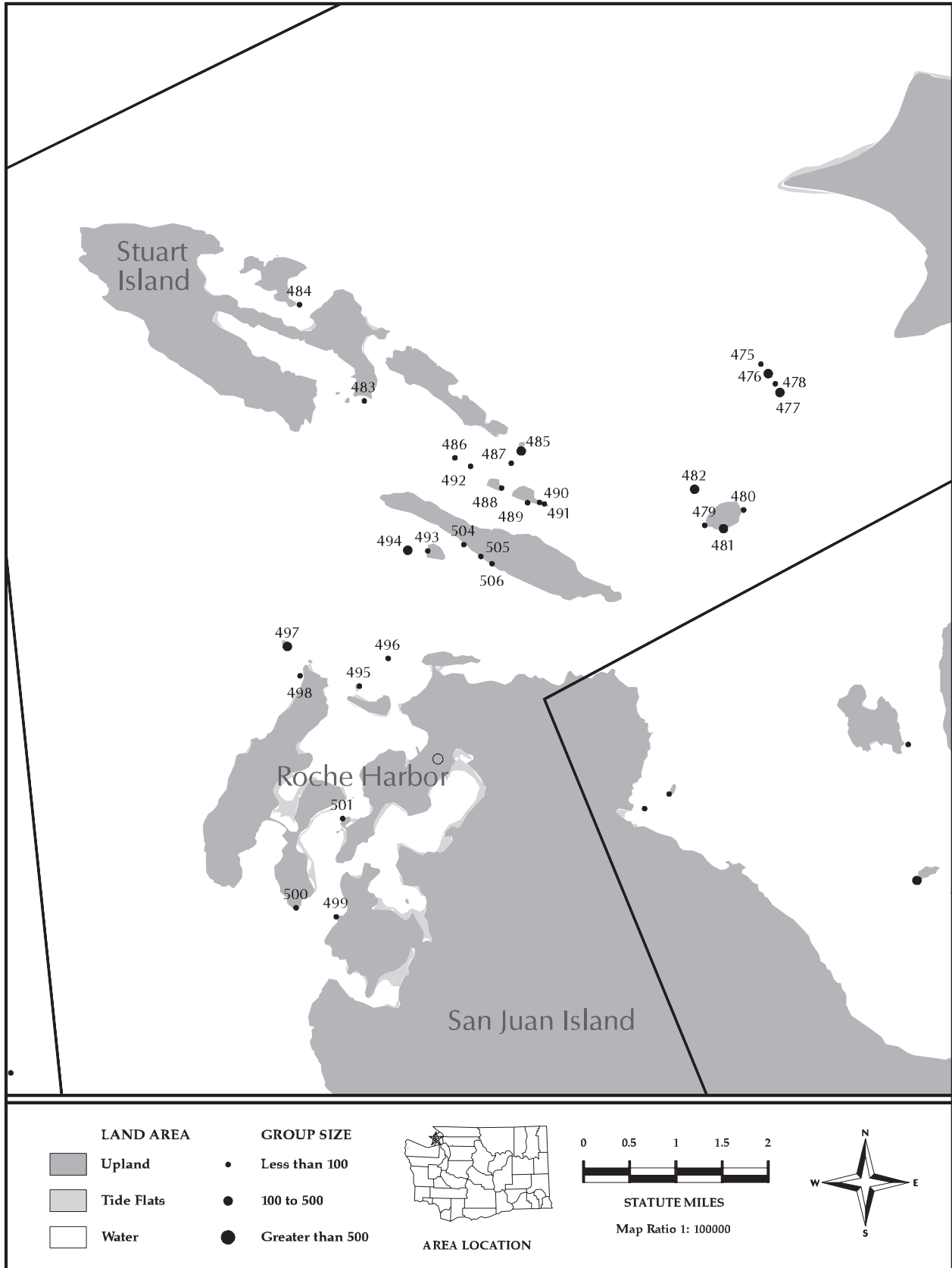
San Juan Islands

Map 13A: Haro Strait-North

ID	Location	Latitude	Longitude	Species	Description
461	Sucia Island Area	48 46.25	122 54.09	PV	Intertidal ledges along north side of island.
462	Sucia Island Area	48 45.37	122 55.13	PV	Intertidal rocks off southwest side of island.
463	Echo Bay, Ewing Island	48 45.77	122 52.58	PV	Intertidal areas during pupping season.
464	Echo Bay, Finger Islands	48 45.46	122 53.32	PV	Intertidal ledges along north side of island.
465	Echo Bay, Finger Islands	48 45.17	122 52.86	PV	Intertidal ledges along south east side of island.
466	Clements Reef	48 46.55	122 53.21	PV	Intertidal areas on reef (USFWS ID 44).
467	Reef SE of Clements	48 46.19	122 52.64	PV	Intertidal areas on reef (USFWS ID 45) south east of Clements Reef.
468	Parker Reef	48 43.56	122 53.57	PV	Intertidal areas on reef (USFWS ID 46).
469	Patos Island	48 47.34	122 58.09	PV	Intertidal ledges and reef areas on north side.
470	Bare Island	48 43.79	123 00.79	PV	Intertidal ledges around Bare Island (USFWS ID 84).
471	Reef E of Skipjack Is.	48 43.83	123 01.22	PV	Intertidal reef area between Bare and Skipjack Islands.
472	Skipjack Island	48 43.98	123 02.26	PV	Intertidal ledges on northwest side of island (USFWS ID 42).
473	Skipjack Island	48 44.00	123 02.04	PV	Intertidal ledges on northeast side of island (USFWS ID 42).
474	Reef E of Skipjack	48 43.99	123 01.70	PV	Intertidal ledges and reef area around unnamed rock (USFWS ID 43) east of the Skipjack Island.
503	Freeman Island	48 41.97	122 57.04	PV	Intertidal ledges and reef areas around Freeman Island.
508	Pt. Doughty	48 42.74	122 56.98	PV	Intertidal ledges and rocks along south side of Point Doughty.

San Juan Islands

Map 13B: Haro Strait-Central



San Juan Islands

Map 13B: Haro Strait-Central

ID	Location	Latitude	Longitude	Species	Description
475	White Rock Area	48 40.27	123 04.43	PV	Intertidal areas on the north White Rock (USFWS ID 40).
476	White Rock Area	48 40.18	123 04.31	PV	Intertidal areas on the middle White Rock (USFWS ID 40).
477	White Rock Area	48 40.01	123 04.15	PV	Intertidal areas on the south White Rock (USFWS ID 40).
478	White Rock Area	48 40.09	123 04.21	PV	Intertidal areas on the reef off the south end of White Rock.
479	Flattop Island	48 38.74	123 05.15	PV	Intertidal areas on west end of Flattop Island (USFWS ID 39).
480	Flattop Island	48 38.89	123 04.60	PV	Intertidal areas on east end of island.
481	Flattop Island	48 38.71	123 04.88	PV	Intertidal ledges and reef on south side of island.
482	Gull Rock	48 39.07	123 05.31	PV	Intertidal areas around rock (USFWS ID 38).
483	Stuart Is./Reid Harbor	48 39.80	123 10.04	PV	Intertidal ledges and reefs around entrance into Reid Harbor.
484	Satellite Is./Prevost Harbor	48 40.68	123 11.00	PV	Intertidal ledges and reef areas around Satellite Island in Prevost Harbor.
485	Ripple Island	48 39.38	123 07.79	PV	Intertidal areas around island (USFWS ID 35).
486	Gull Reef	48 39.29	123 08.72	PV	Intertidal rocks and reef areas around Gull Reef (USFWS ID 34).
487	Shag Reef	48 39.26	123 07.92	PV	Intertidal areas around Shag Reef (USFWS ID 36).
488	Little Cactus Island	48 39.02	123 08.05	PV	Intertidal ledges and rocks around Little Cactus Island (USFWS ID 37).
489	Cactus Island Area	48 38.89	123 07.67	PV	Intertidal ledges and reef areas on south side of Cactus Island.
490	Cactus Island Area	48 38.90	123 07.51	PV	Intertidal ledges and reef areas on east end of Cactus Island.
491	Rocks SE of Cactus	48 38.89	123 07.43	PV	Intertidal rocks and reef areas off southeast end of Cactus Island.
492	Rf Betw Gull Rf & Cactus	48 39.22	123 08.50	PV	Intertidal rocks and reef areas between Gull Reef and Little Cactus Island.
493	Sentinel Island	48 38.41	123 09.07	PV	Intertidal ledges around Sentinel Island.
494	Sentinel Rock	48 38.41	123 09.35	PV	Intertidal rocks and reef areas around Sentinel Rock (USFWS ID 32).
495	Posey Is, Reef N of Pearl	48 37.12	123 09.97	PV	Intertidal rocks and reef areas on north side of Pearl Island.
496	Barren Island	48 37.39	123 09.58	PV	Intertidal rocks and reef areas around Barren Island (USFWS ID 30).
497	Battleship Island	48 37.46	123 11.01	PV	Intertidal ledges and reef areas around Battleship Island (USFWS ID 31).
498	Rocks off McCracken Pt	48 37.19	123 10.82	PV	Intertidal rocks and reef areas southwest of McCracken Point.
499	So Henry Island Area	48 34.94	123 10.19	PV	Intertidal rocks and reef areas around south entrance to Mosquito Pass.
500	So Henry Island Area	48 35.01	123 10.76	PV	Intertidal rocks and reef areas off southeast end of Henry Island.
501	Mosquito Pass Area	48 35.86	123 10.15	PV	Intertidal rocks and reef areas along Mosquito Pass.
504	Speiden Island	48 38.48	123 08.56	PV	Intertidal ledges on south side of Speiden Island.
505	Speiden Island	48 38.37	123 08.31	PV	Intertidal ledges on south side of Speiden Island.
506	Speiden Island	48 38.31	123 08.15	PV	Intertidal ledges on south side of Speiden Island.



San Juan Islands

Map 13C: Haro Strait-South



San Juan Islands

Map 13C: Haro Strait-South

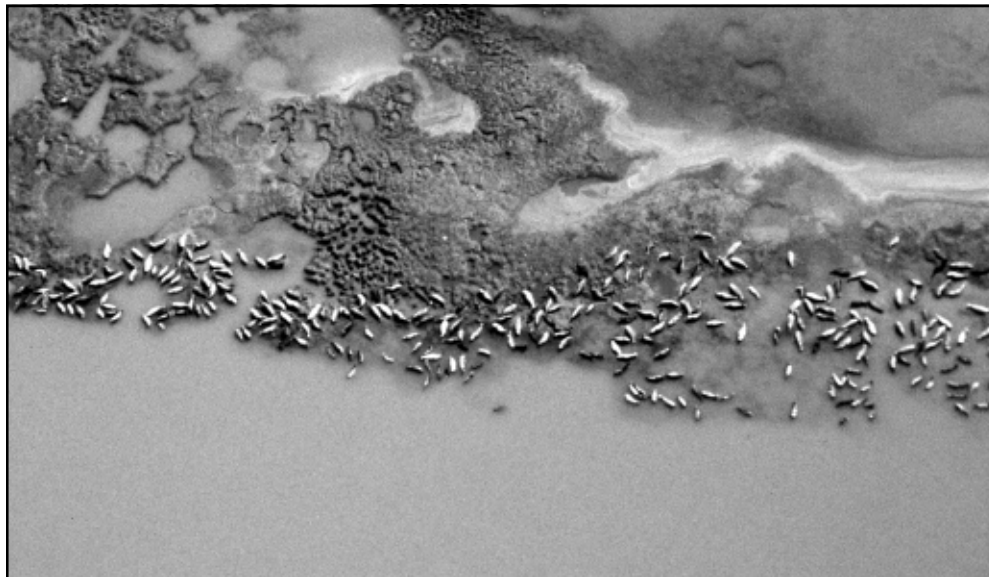
<u>ID</u>	<u>Location</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Species</u>	<u>Description</u>
502	False Bay Area	48 28.87	123 04.58	PV	Intertidal rocks and reef area on unnamed rock (USFWS ID 27) off False Bay.
507	Eagle Point Area	48 27.50	123 02.09	PV	Intertidal rocks and reef areas off Eagle Point.

Region 14: British Columbia

Use NOAA Charts 18400 (Strait of Georgia and Strait of Juan de Fuca), 18421 (Strait of Juan de Fuca and Strait of Georgia/Drayton Harbor), 18465 (Strait of Juan de Fuca-eastern part) for navigation and bathymetry details.

Numerous harbor seal haulout sites are located on intertidal rocks, reefs, and islands in this region. Peak counts occur during the pupping season (mid-June through August) and annual molt (mid-August through October). The primary sea lion haulout sites, which are used by both Steller and California sea lions, are located at Race Rocks and Trial Island (off Victoria). Additional sites used by sea lions during the spring are located at the Belle Chain and at Sand Heads.

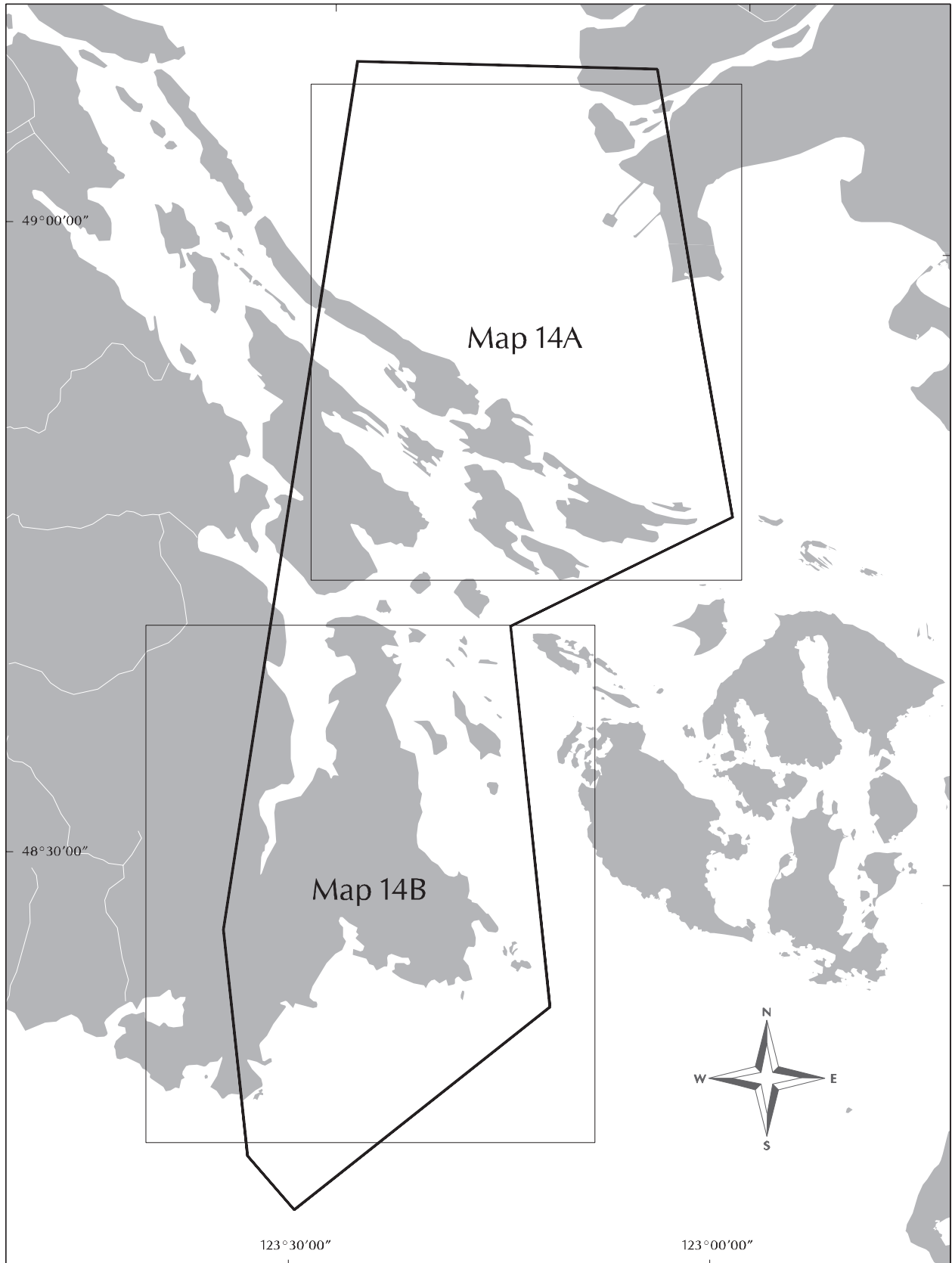
Note: Pinniped haulout sites identified in this region are only those sites adjacent to Washington waters and do not represent all sites in British Columbia waters. Users of this atlas are directed to consult the Department of Fisheries and Oceans, Pacific Biological Station and Nanaimo, British Columbia for additional sites and details on other haulout sites in British Columbia waters.



Harbor seals hauled out along Fraser River near Steveston, April 17, 1997



British Columbia Region 14



Region 14: British Columbia

<u>ID</u>	<u>Location</u>	<u>Survey Code</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Species</u>	<u>Count</u>	<u>Use</u>
509	Boiling Reef	14.01	48 47.33	123 2.27	PV	100-500	LOW
510	Race Rocks	14.02	48 17.79	123 31.76	PV,ZC,EJ	100-500	LOW
511	Chain Islets	14.03	48 25.24	123 15.83	PV	100-500	LOW
512	Trial Island	14.04	48 24.29	123 17.97	PV,ZC,EJ	100-500	LOW
513	Kelp Reefs	14.05	48 33.37	123 14.72	PV	<100	LOW
514	D'Arcy Island	14.06	48 33.25	123 16.62	PV	<100	LOW
515	Sallas Rocks	14.07	48 35.11	123 17.46	PV	100-500	LOW
516	Little D'Arcy	14.08	48 34.24	123 15.55	PV	<100	LOW
517	Cooper Reef	14.09	48 40.38	123 16.33	PV	100-500	LOW
518	Java Islets	14.10	48 45.57	123 6.21	PV	<100	LOW
519	Tumbo Island Area	14.11	48 47.98	123 5.59	PV	<100	LOW
520	Tumbo Island Area	14.11	48 48.19	123 6.76	PV	<100	LOW
521	Belle Chain Area	14.12	48 49.57	123 10.54	PV,EJ	100-500	LOW
522	Belle Chain Area	14.12	48 49.67	123 11.56	PV	<100	LOW
523	Belle Chain Area	14.12	48 50.42	123 12.65	PV	<100	LOW
524	Gossip Island	14.13	48 53.52	123 18.74	PV	<100	LOW
525	Fraser R./Roberts Bank	14.14	49 6.64	123 11.97	PV	100-500	LOW
526	Fraser R./Roberts Bank	14.14	49 6.24	123 11.51	PV	100-500	LOW
527	Fraser R./Roberts Bank	14.14	49 3.88	123 11.78	PV	100-500	LOW
528	Fraser R./Roberts Bank	14.14	49 4.15	123 9.81	PV	<100	LOW
529	Tsawwassen Ferry	14.15	49 0.67	123 6.77	PV	<100	LOW
530	Se Mayne/Edith Point	14.16	48 51.41	123 15.17	PV	<100	LOW
531	Fraser R./Sand Heads Jetty	14.17	49 6.41	123 18.01	ZC	100-500	ALL

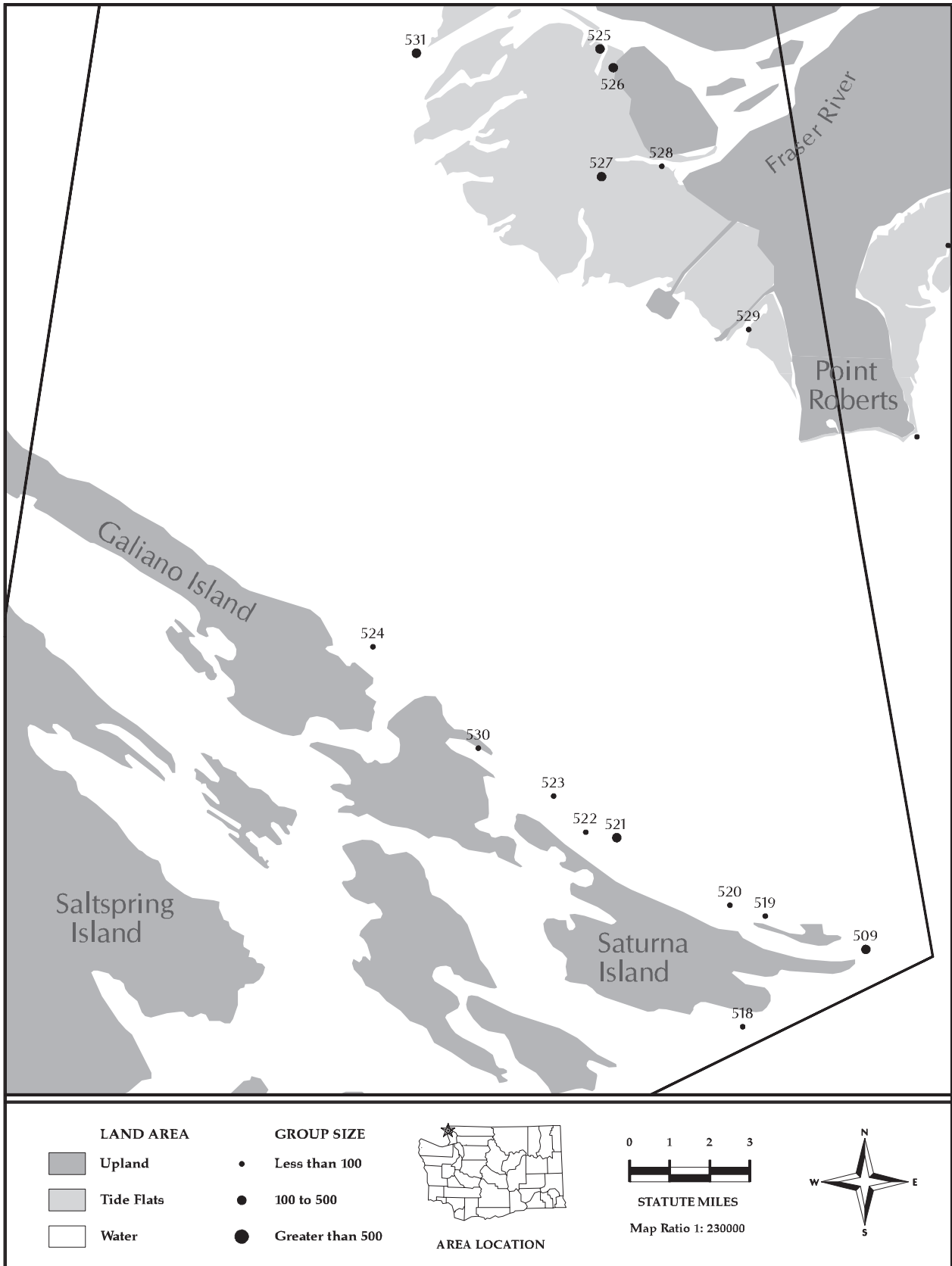
Region 14: British Columbia

ID	Description
509	Intertidal rocks and reef areas around Boiling Reef.
510	Intertidal rocks and reef areas around Race Rocks.
511	On scattered intertidal rocks and reef areas around Chain Islets.
512	Intertidal rocks and reef areas around Trail Island.
513	Intertidal rocks and reef areas around Kelp Reef.
514	Intertidal rocks and reef areas around D'Arcy Island.
515	Intertidal rocks and reef areas around Sallas Rocks.
516	Intertidal rocks and reef areas around Little D'Arcy Island.
517	Intertidal rocks and reef areas around Cooper Reef.
518	Intertidal rocks and reef areas around the Java Islets.
519	Intertidal rocks and reef areas off west end of Tumbo Island.
520	Intertidal rocks and reef areas off west end of Tumbo Island.
521	Intertidal rocks and reef areas of the Belle Chain.
522	Intertidal rocks and reef areas just west of Belle Chain.
523	Intertidal rocks and reef areas on north end of Belle Chain.
524	Intertidal ledges and reef areas around Gossip Island.
525	Intertidal channels and shoals along Reifel Island.
526	Intertidal channels and shoals along southeast side of Reifel Island.
527	Intertidal channels and shoals on Roberts Bank.
528	Intertidal channels and shoals on Roberts Bank.
529	Intertidal areas around jetty just south of Tswwassen ferry terminal.
530	Intertidal ledges and rocks off Edith Point on Mayne Island.
531	On end of jetty near Sand Heads light during spring months.



British Columbia

Map 14A: Fraser River to Gulf Islands



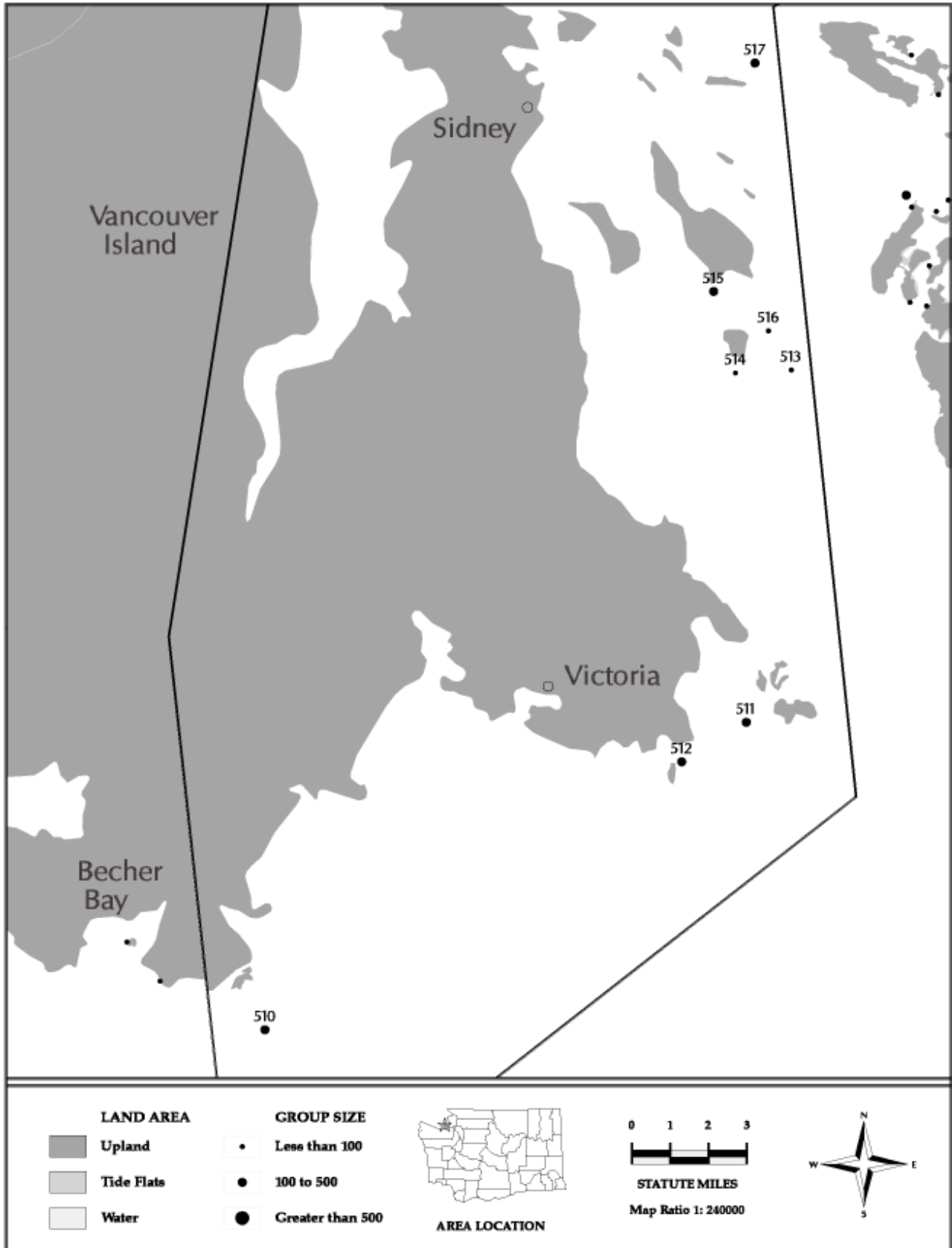
British Columbia
Map 14A: Fraser River to Gulf Islands

ID	Location	Latitude	Longitude	Species	Description
509	Boiling Reef	48 47.33	123 02.27	PV	Intertidal rocks and reef areas around Boiling Reef.
518	Java Islets	48 45.57	123 06.21	PV	Intertidal rocks and reef areas around the Java Islets.
519	Tumbo Island Area	48 47.98	123 05.59	PV	Intertidal rocks and reef areas off west end of Tumbo Island.
520	Tumbo Island Area	48 48.19	123 06.76	PV	Intertidal rocks and reef areas off west end of Tumbo Island.
521	Belle Chain Area	48 49.57	123 10.54	PV,EJ	Intertidal rocks and reef areas of the Belle Chain.
522	Belle Chain Area	48 49.67	123 11.56	PV	Intertidal rocks and reef areas just west of Belle Chain.
523	Belle Chain Area	48 50.42	123 12.65	PV	Intertidal rocks and reef areas on north end of Belle Chain.
524	Gossip Island	48 53.52	123 18.74	PV	Intertidal ledges and reef areas around Gossip Island.
525	Fraser R./Roberts Bank	49 06.64	123 11.97	PV	Intertidal channels and shoals along Reifel Island.
526	Fraser R./Roberts Bank	49 06.24	123 11.51	PV	Intertidal channels and shoals along southeast side of Reifel Island.
527	Fraser R./Roberts Bank	49 03.88	123 11.78	PV	Intertidal channels and shoals on Roberts Bank.
528	Fraser R./Roberts Bank	49 04.15	123 09.81	PV	Intertidal channels and shoals on Roberts Bank.
529	Tsawwassen Ferry	49 00.67	123 06.77	PV	Intertidal areas around jetty just south of Tsawwassen ferry terminal.
530	Se Mayne/Edith Point	48 51.41	123 15.17	PV	Intertidal ledges and rocks off Edith Point on Mayne Island.
531	Fraser R./Sand Heads Jetty	49 06.41	123 18.01	ZC	On end of jetty near Sand Heads light during spring months.



Steller sea lions resting at Belle Chain, British Columbia, May 19, 1997.

British Columbia Region 14B: Gulf Islands to Race Rocks



British Columbia
Map 14B: Gulf Islands to Race Rocks

ID	Location	Latitude	Longitude	Species	Description
510	Race Rocks	48 17.79	123 31.76	PV,ZC,EJ	Intertidal rocks and reef areas around Race Rocks.
511	Chain Islets	48 25.24	123 15.83	PV	On scattered intertidal rocks and reef areas around Chain Islets.
512	Trial Island	48 24.29	123 17.97	PV,ZC,EJ	Intertidal rocks and reef areas around Trail Island.
513	Kelp Reefs	48 33.37	123 14.72	PV	Intertidal rocks and reef areas around Kelp Reef.
514	D'Arcy Island	48 33.25	123 16.62	PV	Intertidal rocks and reef areas around D'Arcy Island.
515	Sallas Rocks	48 35.11	123 17.46	PV	Intertidal rocks and reef areas around Sallas Rocks.
516	Little D'Arcy	48 34.24	123 15.55	PV	Intertidal rocks and reef areas around Little D'Arcy Island.
517	Cooper Reef	48 40.38	123 16.33	PV	Intertidal rocks and reef areas around Cooper Reef.