

<u>Zone 24</u>								
Shore	south							
Total Surveys	6							
Start Point	Sadie Cove							
Start Lat/Long								
End Point	Sadie Cove							
End Lat/Long								
Dates Walked	1988, 1990-91, 2000-01, 2003, 2005, 2006							
Spring Surveys	4							
Fall Surveys	5							
First Walked	1988							
Last Walked	2006							
Total Person-Hours	70							
Total Trash Bags Collected	8							
Total Estimated Weight of Trash Collected	20							
<u>General Info</u>								
Date	30-Apr-88	29-Apr-90	5-May-91	19-May-91	27-Sep-00	19-Sep-01	11.09.03	10.9.05
Start Time		1130	1440	1100	840	900	1830	1030
End Time		1530	1510	1500	1040	1200	1900	1630
Lowest Tide		-2.6			-2.5	-3		1
	at time	1229			847	2206		30
Temperature (F)					38	50-55	55	40
Sky					partly sunn	cloudy	sunny	
Vertical Zones Walked:								
	High				x	x		x
	Middle	x			x	x		x
	Low	x			x	x		
# of Observers	1	1	3	1	5	4	5	2
Hours Spent	10	4	0.5	4	2	3	0.5	6
Person-Hours	10	4	1.5	4	10	12	2.5	12
Shoreline Walked (miles)	12.5		0.25	5	1.25	1.5	0	1.5
Total Trip Mileage						3		
Did Observers . . .								
	Hike?	x	x	x	x	x		x
	Kayak?							

Date	30-Apr-88	29-Apr-90	5-May-91	19-May-91	27-Sep-00	19-Sep-01	11.09.03	10.9.05
Other (specify)?						16 miles round out of Sa		boated
Trash Bags Collected		1	3	1		2	0	0
Estimated Weight of Collected Trash							0	0
<u>Wildlife</u>								
<i>Birds</i>								
Loons		1						9
Sea Ducks	91	123		38				89
Other Ducks and Geese	17				25			25
Bald Eagles								
Adults	25	3		2	1	1		17
Immatures	2	3						
Nests	3	1				1		
Shorebirds								
Seabirds		38		50				75
Crows and Ravens	18	72		40				28
Others (see separate Bird list)	25	8			5			14
<i>Domestic Mammals</i>								
Cattle								
Horses								
Dogs	1							1
Other								
<i>Land Mammals</i>								
Moose								
Adults								
Calves								
Black Bears	1							5
Brown Bears								
Land/River Otters								
Red Squirrels	16				1	1		
Tracks Identified				river otter				
Other	21 mountain	3 mountain goats.					3 mountain go	mt goats
<i>Marine Mammals</i>								
Sea Otters	4							7
Harbor Seals	6							10

Date	30-Apr-88	29-Apr-90	5-May-91	19-May-91	27-Sep-00	19-Sep-01	11.09.03	10.9.05
Frilled Dogwinkle								
File Dogwinkle						x		
Big-mouth Whelk						x		
Nudibranchs								
Maned Nudibranch					x			
False Sea Lemon (False Lemon Peel)								
Orange-tipped Nudibranch								
Opalescent Nudibranch						x		
Bushy-backed Nudibranch								
Clams	x	x		x	x			
Nuttal's Cockle								
Northwest Ugly Clam								
Arctic Rock Borer						x		
Baltic Macoma								
Stained Macoma								
Pacific Surf Clam								
Truncated Mya								
Steamer Clam (Pacific Littleneck Clam)						x		
Butter Clam					x	x		
Razor Clam								
Mussels	x	x		x	x			
Horse Mussel						x		
Pacific Blue Mussel						x		x
Scallops								
Pink Scallop						x		
Jingles								
Rock Jingle						x		
Cephalopods								
Giant Pacific Octopus					x	x		
Stubby Squid								
Arthropods								
Barnacles		x		x	x			
Acorn Barnacle						x		x
Pelagic Gooseneck Barnacle								
Thatched Acorn Barnacle						x		
Crabs		x		x	x			

Date	30-Apr-88	29-Apr-90	5-May-91	19-May-91	27-Sep-00	19-Sep-01	11.09.03	10.9.05
Dungeness Crab								
Black-clawed Cancer Crab						x		
Red Hermit Crab								
Striped Hermit Crab								
Decorator Crab								
Carapace Crab								
Red King Crab								
Northern Kelp Crab								
Helmet Crab								
Shrimp								
Broken-back Shrimp								
Coonstripe Shrimp								
Sand Shrimp								
Isopods								
Pillbug Isopod								
Rockweek Isopod								
Amphipods								
Skeleton Shrimp								
Small Beach Hopper						x		
Echinoderms								
Sea Stars	x	x		x	x			
Little Six-rayed Star						x		
Red-banded Star (Rainbow Star)						x		
Ochre Star								
Sunflower Star					x	x		x
Morning Sun Star						x		
Stimpson's Sun Star						x		
Rose Star						x		
Leather Star						x		
True Star (False Ochre Star, Mottled Star)					x	x		x
Blood Star						x		
Brittle Stars								
Serpent Star								
Daisy Brittle Star								
Sea Urchins	x	x		x	x			
Green Sea Urchin						x		

Date	30-Apr-88	29-Apr-90	5-May-91	19-May-91	27-Sep-00	19-Sep-01	11.09.03	10.9.05
Red Sea Urchin								
Sea Cucumbers								
Silky Burrowing Cucumber								
Orange Cucumber (Red Cucumber)						x		
Tar-spot Cucumber (Black Cucumber)						x		
Sand Dollars								
Green-spined Sand Dollar (Northern Sand Dollar)								
Chordates								
Tunicates								
Colonial Tunicate (Sea Pork)					x			
Sea Peach								
Seaweeds								
Green Seaweed		x		x	x			
Band						x		x
Attached						x		x
Washed Up						x		
Red Seaweed		x		x	x			
Band								
Attached						x		
Washed Up								
Rockweed								
Band					x	x		x
Attached						x		
Washed Up								x
Kelps								
Band								
Attached								
Washed Up						x		x
Eelgrass								
Band								
Attached								
Washed Up					x	x		
Beach Substrate								
Type		rocky	rocky, pebl	pebbles	rocky	rocky, pebbles		see map

Date	30-Apr-88	29-Apr-90	5-May-91	19-May-91	27-Sep-00	19-Sep-01	11.09.03	10.9.05
Comments								
<i>Most Peculiar Item Collected?</i>								
<i>Comments</i>	Glass, met	Glass and	Glass, alur	Glass, aluminum cans rare. Metal, plastic containers, sty				
<u>Additional Observations and Comments</u>	3 year-rour	Fish and G	Building is	The weathe	Lots of exc	Fucus growing on dead branches		

<u>Zone 24</u>									
Shore									
Total Surveys									
Start Point									
Start Lat/Long									
End Point									
End Lat/Long									
Dates Walked									
Spring Surveys									
Fall Surveys									
First Walked									
Last Walked									
Total Person-Hours									
Total Trash Bags Collected									
Total Estimated Weight of Trash Collected									
<u>General Info</u>									
Date	09.23.06								
Start Time	1030								
End Time	1730								
Lowest Tide	0.07								
	at time	930							
Temperature (F)	45								
Sky	cloudy								
Vertical Zones Walked:									
	High								
	Middle	x							
	Low								
# of Observers	2								
Hours Spent	7								
Person-Hours	14	0	0	0	0	0	0	0	0
Shoreline Walked (miles)	10								
Total Trip Mileage	20								
Did Observers . . .									
	Hike?	x							
	Kayak?								

Date		09.23.06								
	Other (specify)?	boat								
Trash Bags Collected		1								
Estimated Weight of Collected Trash		20								
	<u>Wildlife</u>									
	<i>Birds</i>									
Loons		3								
Sea Ducks		90								
Other Ducks and Geese		24								
Bald Eagles										
	Adults	20								
	Immatures	3								
	Nests									
Shorebirds										
Seabirds		262+								
Crows and Ravens		79								
Others (see separate Bird list)		2								
	<i>Domestic Mammals</i>									
Cattle										
Horses										
Dogs										
Other										
	<i>Land Mammals</i>									
Moose										
	Adults									
	Calves									
Black Bears		3								
Brown Bears										
Land/River Otters										
Red Squirrels		1								
Tracks Identified										
Other		mountain goats								
	<i>Marine Mammals</i>									
Sea Otters		5								
Harbor Seals		6								

Date	09.23.06								
	<u>Bluff and Cliff Erosion</u>								
Comments	none								
	<u>Human Activities</u>								
Walking									
	Signs of								
	Actual observation								
Camping									
	Signs of								
	Actual observation								
Partying									
	Signs of								
	Actual observation								
Fire Pits									
	Signs of								
	Actual observation								
Trash Accumulations									
	Signs of								
	Actual observation								
Clamming									
	Signs of								
	Actual observation								
Fishing									
	Signs of								
	Actual observation								
Coaling									
	Signs of								
	Actual observation								
Picnicking									
	Signs of								
	Actual observation								
Horseback Riding									
	Signs of								

Date	09.23.06								
<u>Outfalls or Pipes</u>									
Number									
Comments									
<u>Toxic Pollution</u>									
Fuel (oil, gas, etc.)									
Lubricating Oil									
Paint									
Batteries									
<u>Trash & Debris</u>									
(from International Coastal Cleanup Data Card)									
<i>Shoreline and Recreational Activities</i>									
Bags/Food Wrappers				4					
Balloons				0					
Beverage Bottles, plastic, 2-liter or less				0					
Beverage Bottles, glass				0					
Beverage Cans				0					
Caps, Lids				0					
Clothing, Cloth				0					
Cups, Plates, Forks, Knives, Spoons				0					
Diapers				0					
Fast-food Containers				0					
6-pack Holders				0					
Pull Tabs				0					
Shotgun Shells/Wadding				0					
Straws, Stirrers				0					
Toys				0					
				0					
<i>Ocean/Waterway Activities</i>									
Bait Containers/Packaging				0					
Bleach/Cleaner Bottles				1					
Buoys/Floats				0					
Crab/Lobster/Fish Traps				0					
Crates				0					

Date	09.23.06								
Comments									
<i>Most Peculiar Item Collected?</i>									
<i>Comments</i>	foam, visqueen, metal, fishing gear all common.								
<u>Additional Observations and Comments</u>	on live alder. Several small dead spruce washed up. Birds seen to/from site, but not along beach wa								

<u>Zone 24</u>									
Shore									
Total Surveys									
Start Point									
Start Lat/Long									
End Point									
End Lat/Long									
Dates Walked									
Spring Surveys									
Fall Surveys									
First Walked									
Last Walked									
Total Person-Hours									
Total Trash Bags Collected									
Total Estimated Weight of Trash Collected									
<u>General Info</u>									
Date									
Start Time									
End Time									
Lowest Tide									
at time									
Temperature (F)									
Sky									
Vertical Zones Walked:									
High									
Middle									
Low									
# of Observers									
Hours Spent									
Person-Hours									
	0	0	0	0	0	0	0	0	0
Shoreline Walked (miles)									
Total Trip Mileage									
Did Observers . . .									
Hike?									
Kayak?									

Date									
	<u>Bluff and Cliff Erosion</u>								
Comments									
	<u>Human Activities</u>								
Walking									
		Signs of							
		Actual observation							
Camping									
		Signs of							
		Actual observation							
Partying									
		Signs of							
		Actual observation							
Fire Pits									
		Signs of							
		Actual observation							
Trash Accumulations									
		Signs of							
		Actual observation							
Clamming									
		Signs of							
		Actual observation							
Fishing									
		Signs of							
		Actual observation							
Coaling									
		Signs of							
		Actual observation							
Picnicking									
		Signs of							
		Actual observation							
Horseback Riding									
		Signs of							

Date									
Comments									
<i>Most Peculiar Item Collected?</i>									
<i>Comments</i>									
<u>Additional Observations and Comments</u>	ked. Coast Walkers covered both north and south shore of Sadie Cove near mouth								

<u>Zone 24</u>									
Shore									
Total Surveys									
Start Point									
Start Lat/Long									
End Point									
End Lat/Long									
Dates Walked									
Spring Surveys									
Fall Surveys									
First Walked									
Last Walked									
Total Person-Hours									
Total Trash Bags Collected									
Total Estimated Weight of Trash Collected									
<u>General Info</u>									
Date									
Start Time									
End Time									
Lowest Tide									
at time									
Temperature (F)									
Sky									
Vertical Zones Walked:									
High									
Middle									
Low									
# of Observers									
Hours Spent									
Person-Hours									
0									
Shoreline Walked (miles)									
Total Trip Mileage									
Did Observers . . .									
Hike?									
Kayak?									

Date									
	<u>Bluff and Cliff Erosion</u>								
Comments									
	<u>Human Activities</u>								
Walking									
		Signs of							
		Actual observation							
Camping									
		Signs of							
		Actual observation							
Partying									
		Signs of							
		Actual observation							
Fire Pits									
		Signs of							
		Actual observation							
Trash Accumulations									
		Signs of							
		Actual observation							
Clamming									
		Signs of							
		Actual observation							
Fishing									
		Signs of							
		Actual observation							
Coaling									
		Signs of							
		Actual observation							
Picnicking									
		Signs of							
		Actual observation							
Horseback Riding									
		Signs of							

<u>Zone 24</u>									
Shore									
Total Surveys									
Start Point									
Start Lat/Long									
End Point									
End Lat/Long									
Dates Walked									
Spring Surveys									
Fall Surveys									
First Walked									
Last Walked									
Total Person-Hours									
Total Trash Bags Collected									
Total Estimated Weight of Trash Collected									
<u>General Info</u>									
Date									
Start Time									
End Time									
Lowest Tide									
at time									
Temperature (F)									
Sky									
Vertical Zones Walked:									
High									
Middle									
Low									
# of Observers									
Hours Spent									
Person-Hours									
Shoreline Walked (miles)									
Total Trip Mileage									
Did Observers . . .									
Hike?									
Kayak?									

Date									
	<u>Bluff and Cliff Erosion</u>								
Comments									
	<u>Human Activities</u>								
Walking									
		Signs of							
		Actual observation							
Camping									
		Signs of							
		Actual observation							
Partying									
		Signs of							
		Actual observation							
Fire Pits									
		Signs of							
		Actual observation							
Trash Accumulations									
		Signs of							
		Actual observation							
Clamming									
		Signs of							
		Actual observation							
Fishing									
		Signs of							
		Actual observation							
Coaling									
		Signs of							
		Actual observation							
Picnicking									
		Signs of							
		Actual observation							
Horseback Riding									
		Signs of							

<u>Zone 24</u>	
Shore	
Total Surveys	
Start Point	
Start Lat/Long	
End Point	
End Lat/Long	
Dates Walked	
Spring Surveys	
Fall Surveys	
First Walked	
Last Walked	
Total Person-Hours	
Total Trash Bags Collected	
Total Estimated Weight of Trash Collected	
<u>General Info</u>	
Date	
Start Time	
End Time	
Lowest Tide	
at time	
Temperature (F)	
Sky	
Vertical Zones Walked:	
High	
Middle	
Low	
# of Observers	
Hours Spent	
Person-Hours	
Shoreline Walked (miles)	
Total Trip Mileage	
Did Observers . . .	
Hike?	
Kayak?	

Date	
Other (specify)?	
Trash Bags Collected	
Estimated Weight of Collected Trash	
<u>Wildlife</u>	
<i>Birds</i>	
Loons	
Sea Ducks	
Other Ducks and Geese	
Bald Eagles	
	Adults
	Immatures
	Nests
Shorebirds	
Seabirds	
Crows and Ravens	
Others (see separate Bird list)	
<i>Domestic Mammals</i>	
Cattle	
Horses	
Dogs	
Other	
<i>Land Mammals</i>	
Moose	
	Adults
	Calves
Black Bears	
Brown Bears	
Land/River Otters	
Red Squirrels	
Tracks Identified	
Other	
<i>Marine Mammals</i>	
Sea Otters	
Harbor Seals	

Date	
Steller's Sea Lions	
Harbor Porpoises	
Whales	
	Beluga
	Orca
	Minke
	Humpback
	Gray
	Unknown
Other/Unidentified	
<i>Please note any unusual wildlife sightings</i>	
<u>Invertebrates</u>	
<i>(from the Intertidal Biodiversity Checklist)</i>	
<i>Please note any interesting observations or changes in abundance here</i>	ent
<i>Sponges</i>	
Breadcrumb Sponge	
Purple Sponge	
<i>Cnidarians</i>	
<i>Anemones</i>	
Burrowing Green Anemone	
Orange Colonial Anemone	
Frilled (Plumose) Anemone	
Christmas Anemone	
<i>Sea Jellies</i>	
Moon Jelly	
Many-ribbed Hydromedusa	
Compass Jelly	
Lion's Mane Jelly	
<i>Worms</i>	
Giant Flatworm	

Date	
<i>Nemerteans</i>	
Amphiporus (Two-spotted) Ribbon Worm	
Red Ribbon Worm	
<i>Echiurans</i>	
Fat Innkeeper (Alaskan Spoonworm)	
<i>Sipunculids</i>	
Peanut Worm	
<i>Annelids</i>	
Mussel Worm (Clam Worm)	
Northern Feather Duster Worm (Carpet Worm)	
Cone Worm	
Calcareous Tube Worm	
Spiral Tube Worm	
Scaleworm	
<i>Brachiopods</i>	
Transverse Lampshell	
<i>Mollusks</i>	
<i>Chitons</i>	
Gumboot Chiton	
Black Katy Chiton	
Brick Chiton	
Mossy Chiton	
Tiger Chiton	
Lined Chiton	
<i>Limpets</i>	
Dunce Cap Limpet	
Plate Limpet	
<i>Snails</i>	
Hairy Triton	
Sitka Periwinkle	
Helicina Margarite	
Puppet Margarite	
Aleutian Moonsnail	
Ridged Neptune	
Channeled Dogwinkle	
Emarginate Dogwinkle	

Date	
Frilled Dogwinkle	
File Dogwinkle	
Big-mouth Whelk	
<i>Nudibranchs</i>	
Maned Nudibranch	
False Sea Lemon (False Lemon Peel)	
Orange-tipped Nudibranch	
Opalescent Nudibranch	
Bushy-backed Nudibranch	
<i>Clams</i>	
Nuttal's Cockle	
Northwest Ugly Clam	
Arctic Rock Borer	
Baltic Macoma	
Stained Macoma	
Pacific Surf Clam	
Truncated Mya	
Steamer Clam (Pacific Littleneck Clam)	
Butter Clam	
Razor Clam	
<i>Mussels</i>	
Horse Mussel	
Pacific Blue Mussel	
<i>Scallops</i>	
Pink Scallop	
<i>Jingles</i>	
Rock Jingle	
<i>Cephalopods</i>	
Giant Pacific Octopus	
Stubby Squid	
<i>Arthropods</i>	
<i>Barnacles</i>	
Acorn Barnacle	
Pelagic Gooseneck Barnacle	
Thatched Acorn Barnacle	
<i>Crabs</i>	

Date	
Dungeness Crab	
Black-clawed Cancer Crab	
Red Hermit Crab	
Striped Hermit Crab	
Decorator Crab	
Carapace Crab	
Red King Crab	
Northern Kelp Crab	
Helmet Crab	
Shrimp	
Broken-back Shrimp	
Coonstripe Shrimp	
Sand Shrimp	
Isopods	
Pillbug Isopod	
Rockweek Isopod	
Amphipods	
Skeleton Shrimp	
Small Beach Hopper	
Echinoderms	
Sea Stars	
Little Six-rayed Star	
Red-banded Star (Rainbow Star)	
Ochre Star	
Sunflower Star	
Morning Sun Star	
Stimpson's Sun Star	
Rose Star	
Leather Star	
True Star (False Ochre Star, Mottled Star)	
Blood Star	
Brittle Stars	
Serpent Star	
Daisy Brittle Star	
Sea Urchins	
Green Sea Urchin	

Date	
Red Sea Urchin	
Sea Cucumbers	
Silky Burrowing Cucumber	
Orange Cucumber (Red Cucumber)	
Tar-spot Cucumber (Black Cucumber)	
Sand Dollars	
Green-spined Sand Dollar (Northern Sand Dollar)	
<i>Chordates</i>	
<i>Tunicates</i>	
Colonial Tunicate (Sea Pork)	
Sea Peach	
<u>Seaweeds</u>	
Green Seaweed	
	Band
	Attached
	Washed Up
Red Seaweed	
	Band
	Attached
	Washed Up
Rockweed	
	Band
	Attached
	Washed Up
Kelps	
	Band
	Attached
	Washed Up
Eelgrass	
	Band
	Attached
	Washed Up
<u>Beach Substrate</u>	
Type	

Date	
<u>Bluff and Cliff Erosion</u>	
Comments	
<u>Human Activities</u>	
Walking	
	Signs of
	Actual observation
Camping	
	Signs of
	Actual observation
Partying	
	Signs of
	Actual observation
Fire Pits	
	Signs of
	Actual observation
Trash Accumulations	
	Signs of
	Actual observation
Clamming	
	Signs of
	Actual observation
Fishing	
	Signs of
	Actual observation
Coaling	
	Signs of
	Actual observation
Picnicking	
	Signs of
	Actual observation
Horseback Riding	
	Signs of

Date	
	Actual observation
Harvesting (specify)	
	Signs of
	Actual observation
Other (specify)	
	<u>Vehicle Use</u>
Cars/Trucks	
	Sets of tracks
	Actual observation
ATVs/Motorcycles	
	Sets of tracks
	Actual observation
Bicycles	
	Sets of tracks
	Actual observation
Aircraft	
	Sets of tracks
	Actual observation
Other (specify)	
	<u>Structures on the Beach</u>
Buildings	
Docks	
Driftwood Structures	
Riprapped Areas	
Erosion Control Structures	
Abandoned Vehicles	
Abandoned Boats	
	Boat Parts
	<u>Archaeological Sites</u>
Shell Middens	
Other (specify)	

Date	
<u>Outfalls or Pipes</u>	
Number	
Comments	
<u>Toxic Pollution</u>	
Fuel (oil, gas, etc.)	
Lubricating Oil	
Paint	
Batteries	
<u>Trash & Debris</u>	
(from International Coastal Cleanup Data Card)	
<i>Shoreline and Recreational Activities</i>	
Bags/Food Wrappers	
Balloons	
Beverage Bottles, plastic, 2-liter or less	
Beverage Bottles, glass	
Beverage Cans	
Caps, Lids	
Clothing, Cloth	
Cups, Plates, Forks, Knives, Spoons	
Diapers	
Fast-food Containers	
6-pack Holders	
Pull Tabs	
Shotgun Shells/Wadding	
Straws, Stirrers	
Toys	
<i>Ocean/Waterway Activities</i>	
Bait Containers/Packaging	
Bleach/Cleaner Bottles	
Buoys/Floats	
Crab/Lobster/Fish Traps	
Crates	

Date	
Fishing Line	
Fishing Lures	
Fishing Nets	
Light Bulbs/Tubes	
Oil/Lube Bottles	
Pallets	
Plastic Sheeting/Tarps	
Rope	
Strapping Bands	
<i>Smoking-Related Activities</i>	
Cigarettes/Cigarette Filters	
Cigarette Lighters	
Cigar Tips	
Tobacco Packaging/Wrappers	
<i>Dumping Activities</i>	
Appliances (refrigerators, washers, etc.)	
Batteries	
Cars/Car Parts	
Construction Materials	
55-gallon Drums	
Tires	
<i>Medical/Personal Hygiene</i>	
Syringes	
Condoms	
Tampons/Tampon Applicators	
<i>Debris Items of Local Concern</i>	
<i>Entangled Animals</i>	
Type of Animal	
Form of Entangling Debris	

Date	
Comments	
<i>Most Peculiar Item Collected?</i>	
<i>Comments</i>	
<u>Additional Observations and Comments</u>	