

<b><u>Zone 12</u></b>									
Shore	north								
Total Surveys	21								
Start Point	Mud Bay Access on Kachemak Way								
Start Lat/Long									
End Point	Miller's Landing								
End Lat/Long									
Dates Walked	1987-92, 96, 98-2006								
Spring Surveys	13								
Fall Surveys	13								
First Walked	1987								
Last Walked	2006								
Total Person-Hours	209.25								
Total Trash Bags Collected	21								
Total Estimated Weight of Trash Collected	453								
<b><u>General Info</u></b>									
Date	25-Apr-87	25-Apr-87	27-Apr-88	30-Apr-88	29-Apr-89	28-Apr-90	29-Apr-90	3-May-90	28-Apr-91
Start Time					1300	1210	1145		950
End Time					1500	1510	1445		1150
Lowest Tide						-4.2	-2.6		-2.5
at time						1136	1229		901
Temperature (F)									
Sky	cloudy	cloudy		sunny					
Vertical Zones Walked:									
High	x	x	x						
Middle		x		x					
Low		x							
# of Observers	4	3	2	2	1	3	2	1	3
Hours Spent	1	3	2	1	2	3	3	1.5	2
Person-Hours	4	9	4	2	2	9	6	1.5	6
Shoreline Walked (miles)		4	3.2	2	4	2	3	3.2	4
Total Trip Mileage									
Did Observers . . .									
Hike?	x	x	x	x	x	x	x	x	x
Kayak?									

Date	25-Apr-87	25-Apr-87	27-Apr-88	30-Apr-88	29-Apr-89	28-Apr-90	29-Apr-90	3-May-90	28-Apr-91
Other (specify)?									
<b>Trash Bags Collected</b>		3			1	1	1		
<b>Estimated Weight of Collected Trash</b>									
<b><u>Wildlife</u></b>									
<b><i>Birds</i></b>									
Loons			10					5	
Sea Ducks	328	72	23					12	3
Other Ducks and Geese			307					280	
Bald Eagles									
Adults	2	3	7	5	2	7	2	7	21
Immatures	2		2	6	2	2		3	2
Nests					1	1		1	
Shorebirds		16	5	300				756	10
Seabirds	4	4	2009		2	2	100	339	15
Crows and Ravens	7	11	105	7	3	14	1	24	12
Others (see separate Bird list)		7	12	4				16	4
<b><i>Domestic Mammals</i></b>									
Cattle	2								
Horses									
Dogs	1	1	2						9
Other									
<b><i>Land Mammals</i></b>									
Moose									
Adults									
Calves		1							
Black Bears									
Brown Bears									
Land/River Otters									
Red Squirrels									
Tracks Identified			moose, co	moose				dog, moose	
Other									
<b><i>Marine Mammals</i></b>									
Sea Otters									
Harbor Seals	3	1	2					3	1





<b>Date</b>	25-Apr-87	25-Apr-87	27-Apr-88	30-Apr-88	29-Apr-89	28-Apr-90	29-Apr-90	3-May-90	28-Apr-91
Frilled Dogwinkle									
File Dogwinkle									
Big-mouth Whelk									
<b>Nudibranchs</b>									
Maned Nudibranch									
False Sea Lemon (False Lemon Peel)									
Orange-tipped Nudibranch									
Opalescent Nudibranch									
Bushy-backed Nudibranch									
<b>Clams</b>									
Nuttal's Cockle							x		x
Northwest Ugly Clam									
Arctic Rock Borer									
Baltic Macoma									
Stained Macoma									
Pacific Surf Clam									
Truncated Mya									
Steamer Clam (Pacific Littleneck Clam)									
Butter Clam									
Razor Clam									
<b>Mussels</b>									
Horse Mussel			x	x	x	x	x		x
Pacific Blue Mussel									
<b>Scallops</b>									
Pink Scallop									
<b>Jingles</b>									
Rock Jingle									
<b>Cephalopods</b>									
Giant Pacific Octopus									
Stubby Squid									
<b>Arthropods</b>									
<b>Barnacles</b>									
Acorn Barnacle		x		x	x	x			x
Pelagic Gooseneck Barnacle									
Thatched Acorn Barnacle									
<b>Crabs</b>							x		

<b>Date</b>	25-Apr-87	25-Apr-87	27-Apr-88	30-Apr-88	29-Apr-89	28-Apr-90	29-Apr-90	3-May-90	28-Apr-91
Dungeness Crab									
Black-clawed Cancer Crab									
Red Hermit Crab									
Striped Hermit Crab									
Decorator Crab									
Carapace Crab									
Red King Crab									
Northern Kelp Crab									
Helmet Crab									
<b>Shrimp</b>									
Broken-back Shrimp									
Coonstripe Shrimp									
Sand Shrimp									
<b>Isopods</b>									
Pillbug Isopod									
Rockweek Isopod									
<b>Amphipods</b>									
Skeleton Shrimp									
Small Beach Hopper									
<b>Echinoderms</b>									
<b>Sea Stars</b>									
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									
<b>Brittle Stars</b>									
Serpent Star									
Daisy Brittle Star									
<b>Sea Urchins</b>									
Green Sea Urchin							x		

<b>Date</b>	25-Apr-87	25-Apr-87	27-Apr-88	30-Apr-88	29-Apr-89	28-Apr-90	29-Apr-90	3-May-90	28-Apr-91
Red Sea Urchin									
<b>Sea Cucumbers</b>									
Silky Burrowing Cucumber									
Orange Cucumber (Red Cucumber)									
Tar-spot Cucumber (Black Cucumber)									
<b>Sand Dollars</b>									
Green-spined Sand Dollar (Northern Sand Dollar)									
<b>Chordates</b>									
<b>Tunicates</b>									
Colonial Tunicate (Sea Pork)									
Sea Peach									
<b>Seaweeds</b>									
Green Seaweed					x				
Band									
Attached									
Washed Up								x	
Red Seaweed					x	x			x
Band									
Attached									
Washed Up								x	
Rockweed			x	x			x		x
Band									
Attached									
Washed Up								x	
Kelps			x						x
Band									
Attached									
Washed Up									
Eelgrass									
Band									
Attached									
Washed Up									
<b>Beach Substrate</b>									
Type		sand			pebbles, s	rocky, pebl	all		rocky, pebl









<b>Date</b>	25-Apr-87	25-Apr-87	27-Apr-88	30-Apr-88	29-Apr-89	28-Apr-90	29-Apr-90	3-May-90	28-Apr-91
Form of Entangling Debris									
Comments									
<b><i>Most Peculiar Item Collected?</i></b>									
<b><i>Comments</i></b>		Lots of plastic sheets.	Most of the	Metal cans	Plastic con	All along large rusting	Glass, alur		
<b><u>Additional Observations and Comments</u></b>		Portion of l	(Lengthy a	The beach	Up by coal seam of l	Whole bluf	(Lengthy a	Severe bea	



Date	28-Apr-91	4-May-91	13-May-91	9-May-92	22-Sep-96	12-Sep-98	??-Sep-99	12-Sep-99
Other (specify)?								
<b>Trash Bags Collected</b>		1				4	3	
<b>Estimated Weight of Collected Trash</b>								
<b><u>Wildlife</u></b>								
<b><i>Birds</i></b>								
Loons	8		14					
Sea Ducks	9					200		37
Other Ducks and Geese			96					
Bald Eagles								
Adults	10	5	8	6			3	
Immatures	6	3		4			2	
Nests	2							
Shorebirds			8051					
Seabirds	200	50	1770		1	250		
Crows and Ravens		8	28					
Others (see separate Bird list)			40	10	3	4	7	2
<b><i>Domestic Mammals</i></b>								
Cattle								
Horses								
Dogs	7					2		1
Other								
<b><i>Land Mammals</i></b>								
Moose								
Adults		1						
Calves		1						
Black Bears								
Brown Bears								
Land/River Otters								
Red Squirrels								
Tracks Identified			dog, moose		dog		dog	
Other		moose poop						
<b><i>Marine Mammals</i></b>								
Sea Otters								
Harbor Seals	10							





<b>Date</b>	28-Apr-91	4-May-91	13-May-91	9-May-92	22-Sep-96	12-Sep-98	??-Sep-99	12-Sep-99
Frilled Dogwinkle								
File Dogwinkle								
Big-mouth Whelk								
<b>Nudibranchs</b>								
Maned Nudibranch								
False Sea Lemon (False Lemon Peel)								
Orange-tipped Nudibranch								
Opalescent Nudibranch								
Bushy-backed Nudibranch								
<b>Clams</b>		x					x	x
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					x			
Razor Clam								
<b>Mussels</b>		x			x	x		x
Horse Mussel								
Pacific Blue Mussel								
<b>Scallops</b>								
Pink Scallop								
<b>Jingles</b>								
Rock Jingle								
<b>Cephalopods</b>								
Giant Pacific Octopus								
Stubby Squid								
<b>Arthropods</b>								
<b>Barnacles</b>		x				x	x	
Acorn Barnacle								
Pelagic Gooseneck Barnacle								
Thatched Acorn Barnacle								
<b>Crabs</b>					x		x	



<b>Date</b>	28-Apr-91	4-May-91	13-May-91	9-May-92	22-Sep-96	12-Sep-98	??-Sep-99	12-Sep-99
Red Sea Urchin								
<b>Sea Cucumbers</b>								
Silky Burrowing Cucumber								
Orange Cucumber (Red Cucumber)								
Tar-spot Cucumber (Black Cucumber)								
<b>Sand Dollars</b>								
Green-spined Sand Dollar (Northern Sand Dollar)								
<b>Chordates</b>								
<b>Tunicates</b>								
Colonial Tunicate (Sea Pork)								
Sea Peach								
<b>Seaweeds</b>								
Green Seaweed	x	x			x			
Band								
Attached								
Washed Up								
Red Seaweed	x	x						x
Band								
Attached								
Washed Up								
Rockweed								
Band								
Attached								
Washed Up							x	
Kelps								
Band								
Attached						x		
Washed Up								
Eelgrass								
Band								
Attached								
Washed Up								
<b>Beach Substrate</b>								
Type	pe, sand	rocky, mud			pebble, sar	rocky, clay,	rocky, pebl	pebble, sar









<b>Date</b>	28-Apr-91	4-May-91	13-May-91	9-May-92	22-Sep-96	12-Sep-98	??-Sep-99	12-Sep-99
Form of Entangling Debris								
Comments								
<i><b>Most Peculiar Item Collected?</b></i>								
<i><b>Comments</b></i>	Plastic con	Glass, plas	90% of the bottles, can		Aluminum &	Aluminum,	Glass, styr	Firewood, c
<i><b>Additional Observations and Comments</b></i>	ach erosion	I understa	(Lengthy and detailed c		Once past	Large rusty	Very little garbage on t	



Date	19-Sep-00	21-Sep-01	22-Sep-01	25.09.02	13.09.03	10.7.04	9.21.05	10.7.05	9.26.06
Other (specify)?									
<b>Trash Bags Collected</b>		5		did not collect		0	0	2	0
<b>Estimated Weight of Collected Trash</b>		453							0
<b><u>Wildlife</u></b>									
<b><i>Birds</i></b>									
Loons		1	1	1	0	2			
Sea Ducks			4	26	12	17	80		x
Other Ducks and Geese		2	38		15	10	7	992	
Bald Eagles									
Adults	1	8	1		6	3	1	3	4
Immatures	2	3	1		1				
Nests		1	2		0				
Shorebirds				87 sandhill cranes					
Seabirds	3	3	68		264	137	32	198	
Crows and Ravens			65		0	55	17	x	
Others (see separate Bird list)		51	25			36	8	x	
<b><i>Domestic Mammals</i></b>									
Cattle					0				
Horses					0				
Dogs		1	1		0	2	2		
Other					0				
<b><i>Land Mammals</i></b>									
Moose					0				
Adults					0				
Calves					0				
Black Bears					0				
Brown Bears					0				
Land/River Otters					0				
Red Squirrels				1	1			2	1
Tracks Identified		dog			0				
Other					0				
<b><i>Marine Mammals</i></b>									
Sea Otters			14	45	0	10	2		
Harbor Seals			13	1	4	5	5	5	3

<b>Date</b>	19-Sep-00	21-Sep-01	22-Sep-01	25.09.02	13.09.03	10.7.04	9.21.05	10.7.05	9.26.06
Steller's Sea Lions					0				
Harbor Porpoises					0				
Whales					0				
Beluga					0				
Orca					0				
Minke					0				
Humpback					0				
Gray					0				
Unknown					0				
Other/Unidentified					0				
<b><i>Please note any unusual wildlife sightings</i></b>	cupine	Moose head tied to sh		1 dead 48" harbor seal, 1 dead dogfish shark					
<b><u>Invertebrates</u></b>									
<i>(from the Intertidal Biodiversity Checklist)</i>					checklist not included				
<b><i>Please note any interesting observations or changes in abundance here</i></b>	ty cockle an	Moon snail		Abundant burrowing worm castings.	Mya arenaria--soft-shelled--uncommon to				
<b><u>Sponges</u></b>									
Breadcrumb Sponge		x							
Purple Sponge									
<b><u>Cnidarians</u></b>									
<b><u>Anemones</u></b>									
Burrowing Green Anemone		x	x	x		x	x	x	
Orange Colonial Anemone									
Frilled (Plumose) Anemone									
Christmas Anemone									
<b><u>Sea Jellies</u></b>									
Moon Jelly		x							
Many-ribbed Hydromedusa									
Compass Jelly									
Lion's Mane Jelly									
<b><u>Worms</u></b>									
Giant Flatworm		x							

Date	19-Sep-00	21-Sep-01	22-Sep-01	25.09.02	13.09.03	10.7.04	9.21.05	10.7.05	9.26.06
<b>Nemerteans</b>									
Amphiporus (Two-spotted) Ribbon Worm							x		
Red Ribbon Worm							x		
<b>Echiurans</b>									
Fat Innkeeper (Alaskan Spoonworm)		x							
<b>Sipunculids</b>									
Peanut Worm									
<b>Annelids</b>									
Mussel Worm (Clam Worm)									
Northern Feather Duster Worm (Carpet Worm)									
Cone Worm									
Calcareous Tube Worm							x		
Spiral Tube Worm									
Scaleworm			slimebag worm				x		
<b>Brachiopods</b>									
Transverse Lampshell									
<b>Mollusks</b>									
<b>Chitons</b>									
Gumboot Chiton									
Black Katy Chiton									
Brick Chiton									
Mossy Chiton									
Tiger Chiton									
Lined Chiton									
<b>Limpets</b>									
Dunce Cap Limpet									
Plate Limpet							x		
<b>Snails</b>									
Hairy Triton		x							
Sitka Periwinkle		x	x			x	x		
Helicina Margarite									
Puppet Margarite									
Aleutian Moonsnail									
Ridged Neptune		x							
Channeled Dogwinkle		x							
Emarginate Dogwinkle		x							





<b>Date</b>	19-Sep-00	21-Sep-01	22-Sep-01	25.09.02	13.09.03	10.7.04	9.21.05	10.7.05	9.26.06
Red Sea Urchin									
<b>Sea Cucumbers</b>									
Silky Burrowing Cucumber									
Orange Cucumber (Red Cucumber)									
Tar-spot Cucumber (Black Cucumber)									
<b>Sand Dollars</b>									
Green-spined Sand Dollar (Northern Sand Dollar)									
<b>Chordates</b>									
<b>Tunicates</b>									
Colonial Tunicate (Sea Pork)									
Sea Peach									
<b>Seaweeds</b>									
Green Seaweed									
Band		x							
Attached			x	x	x	x			
Washed Up		x	x				x	x	
Red Seaweed									
Band		x							
Attached		x							
Washed Up		x							
Rockweed									
Band		x							
Attached		x	x		x				
Washed Up					x		x		
Kelps									
Band		x							
Attached		x							
Washed Up		x				x	x	x	
Eelgrass									
Band		x							
Attached		x	x	x	x	x			
Washed Up		x	x	x	x	x	x	x	
<b>Beach Substrate</b>									
Type	pebble, sand	all	rocky, sand	pebbles, mud	pebbles,	all		all	pebbles, bed



Date	19-Sep-00	21-Sep-01	22-Sep-01	25.09.02	13.09.03	10.7.04	9.21.05	10.7.05	9.26.06
Signs of									
Actual observation									
Harvesting (specify)									
Signs of									1
Actual observation								1	
Other (specify)				slash tree cutting/dumping				driftwood hardwood harvest	
<b><u>Vehicle Use</u></b>									
Cars/Trucks									
Sets of tracks	1					many		5	2
Actual observation		1				3		2	
ATVs/Motorcycles									
Sets of tracks			1	1		tons			x
Actual observation									
Bicycles									
Sets of tracks									
Actual observation									
Aircraft									
Sets of tracks		1							
Actual observation			3	1		2	4	overhead	
Other (specify)	ent		heavy equipment cat (2)						
<b><u>Structures on the Beach</u></b>									
Buildings			1 ready to fall over edge of bluff					1	1
Docks		1	breakwater and dock					1	
Driftwood Structures		5						2	
Riprapped Areas				several	several		several	1	several
Erosion Control Structures				several	6	, esp. at no	several	3	several
Abandoned Vehicles				parts	parts	parts			
Abandoned Boats									
Boat Parts									
				2 culverts					
<b><u>Archaeological Sites</u></b>									
Shell Middens			up on bluff, no evidence on Coast Walk						
Other (specify)		petrified wood							

Date	19-Sep-00	21-Sep-01	22-Sep-01	25.09.02	13.09.03	10.7.04	9.21.05	10.7.05	9.26.06
<b><u>Outfalls or Pipes</u></b>									
Number		7	12	only 4 runni	12		6		
Comments	ern Enterprises--smelled 8 pipes, 4 (sionally dis lot. Some pipes come out of Soil, then have a connectin								
<b><u>Toxic Pollution</u></b>									
Fuel (oil, gas, etc.)		1							
Lubricating Oil									
Paint									
Batteries									
<b><u>Trash &amp; Debris</u></b>									
(from International Coastal Cleanup Data Card)	no data sheet attached, as alone and did not collect								
<b><i>Shoreline and Recreational Activities</i></b>									
Bags/Food Wrappers		21							
Balloons									
Beverage Bottles, plastic, 2-liter or less		3				x		13	
Beverage Bottles, glass		11				x		7	
Beverage Cans		17					1	17	
Caps, Lids		12						2	
Clothing, Cloth		7					1		
Cups, Plates, Forks, Knives, Spoons		8							
Diapers									
Fast-food Containers									
6-pack Holders									
Pull Tabs									
Shotgun Shells/Wadding									
Straws, Stirrers									
Toys									
<b><i>Ocean/Waterway Activities</i></b>									
Bait Containers/Packaging		5							
Bleach/Cleaner Bottles									
Buoys/Floats		2							
Crab/Lobster/Fish Traps						1			



<b>Date</b>	19-Sep-00	21-Sep-01	22-Sep-01	25.09.02	13.09.03	10.7.04	9.21.05	10.7.05	9.26.06
Form of Entangling Debris									
Comments									
<b><i>Most Peculiar Item Collected?</i></b>		Moose head in water, tied to shore, with maggots. Banana tree.							
<b><i>Comments</i></b>	Aluminum and glass bottles		Metal present.				All kinds of trash, area at base of airport beach		
<b><u>Additional Observations and Comments</u></b>	Very misused	21 tires were	(lengthy and	The construction / renovation of 4 ramps with intent of at least 2 to 4					

<b><u>Zone 12</u></b>									
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									
<b><u>General Info</u></b>									
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						
Shoreline Walked (miles)									
Total Trip Mileage									
Did Observers . . .									
Hike?									
Kayak?									











<b>Date</b>									
Red Sea Urchin									
<b>Sea Cucumbers</b>									
Silky Burrowing Cucumber									
Orange Cucumber (Red Cucumber)									
Tar-spot Cucumber (Black Cucumber)									
<b>Sand Dollars</b>									
Green-spined Sand Dollar (Northern Sand Dollar)									
<b><u>Chordates</u></b>									
<b><i>Tunicates</i></b>									
Colonial Tunicate (Sea Pork)									
Sea Peach									
<b><u>Seaweeds</u></b>									
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									
<b><u>Beach Substrate</u></b>									
Type	rock, mud								





Date									
<b><u>Outfalls or Pipes</u></b>									
Number									
Comments	g pipe that leads all the way down cliff, and are discharging. No foam or odors.								
<b><u>Toxic Pollution</u></b>									
Fuel (oil, gas, etc.)									
Lubricating Oil									
Paint									
Batteries									
<b><u>Trash &amp; Debris</u></b>									
(from International Coastal Cleanup Data Card)									
<b><i>Shoreline and Recreational Activities</i></b>									
Bags/Food Wrappers			59						
Balloons			50						
Beverage Bottles, plastic, 2-liter or less			59						
Beverage Bottles, glass			224						
Beverage Cans			196						
Caps, Lids			14						
Clothing, Cloth			16						
Cups, Plates, Forks, Knives, Spoons			72						
Diapers			0						
Fast-food Containers			5						
6-pack Holders			0						
Pull Tabs			0						
Shotgun Shells/Wadding			0						
Straws, Stirrers			0						
Toys			2						
			0						
<b><i>Ocean/Waterway Activities</i></b>									
Bait Containers/Packaging			22						
Bleach/Cleaner Bottles			0						
Buoys/Floats			22						
Crab/Lobster/Fish Traps			5						



<b>Date</b>									
Form of Entangling Debris									
Comments									
<b><i>Most Peculiar Item Collected?</i></b>									
<b><i>Comments</i></b>	ch access rd. is a disgrace. An expedition to view area at base of airport access road clean up party n								
<b><u>Additional Observations and Comments</u></b>	access 4 wheelers on the beack is very distressing. Erosion is worse than it used to be, espeically in p								

<b><u>Zone 12</u></b>									
<b>Shore</b>									
<b>Total Surveys</b>									
<b>Start Point</b>									
<b>Start Lat/Long</b>									
<b>End Point</b>									
<b>End Lat/Long</b>									
<b>Dates Walked</b>									
<b>Spring Surveys</b>									
<b>Fall Surveys</b>									
<b>First Walked</b>									
<b>Last Walked</b>									
<b>Total Person-Hours</b>									
<b>Total Trash Bags Collected</b>									
<b>Total Estimated Weight of Trash Collected</b>									
<b><u>General Info</u></b>									
<b>Date</b>									
<b>Start Time</b>									
<b>End Time</b>									
<b>Lowest Tide</b>									
<b>at time</b>									
<b>Temperature (F)</b>									
<b>Sky</b>									
<b>Vertical Zones Walked:</b>									
High									
Middle									
Low									
<b># of Observers</b>									
<b>Hours Spent</b>									
<b>Person-Hours</b>									
<b>Shoreline Walked (miles)</b>									
<b>Total Trip Mileage</b>									
<b>Did Observers . . .</b>									
Hike?									
Kayak?									





















<b>Date</b>									
Form of Entangling Debris									
Comments									
<b><i>Most Peculiar Item Collected?</i></b>									
<b><i>Comments</i></b>	eeded!								
<b><u>Additional Observations and Comments</u></b>	eat areas from Rowell property to N. Enterprises. Many pips stick out of cliff, 4 were running, situation								

<b><u>Zone 12</u></b>		
<b>Shore</b>		
<b>Total Surveys</b>		
<b>Start Point</b>		
<b>Start Lat/Long</b>		
<b>End Point</b>		
<b>End Lat/Long</b>		
<b>Dates Walked</b>		
<b>Spring Surveys</b>		
<b>Fall Surveys</b>		
<b>First Walked</b>		
<b>Last Walked</b>		
<b>Total Person-Hours</b>		
<b>Total Trash Bags Collected</b>		
<b>Total Estimated Weight of Trash Collected</b>		
<b><u>General Info</u></b>		
<b>Date</b>		
<b>Start Time</b>		
<b>End Time</b>		
<b>Lowest Tide</b>		
<b>at time</b>		
<b>Temperature (F)</b>		
<b>Sky</b>		
<b>Vertical Zones Walked:</b>		
High		
Middle		
Low		
<b># of Observers</b>		
<b>Hours Spent</b>		
<b>Person-Hours</b>		
<b>Shoreline Walked (miles)</b>		
<b>Total Trip Mileage</b>		
<b>Did Observers . . .</b>		
Hike?		
Kayak?		

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

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

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

<b>Date</b>		
Frilled Dogwinkle		
File Dogwinkle		
Big-mouth Whelk		
<b><i>Nudibranchs</i></b>		
Maned Nudibranch		
False Sea Lemon (False Lemon Peel)		
Orange-tipped Nudibranch		
Opalescent Nudibranch		
Bushy-backed Nudibranch		
<b><i>Clams</i></b>		
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		
<b><i>Mussels</i></b>		
Horse Mussel		
Pacific Blue Mussel		
<b><i>Scallops</i></b>		
Pink Scallop		
<b><i>Jingles</i></b>		
Rock Jingle		
<b><i>Cephalopods</i></b>		
Giant Pacific Octopus		
Stubby Squid		
<b><i>Arthropods</i></b>		
<b><i>Barnacles</i></b>		
Acorn Barnacle		
Pelagic Gooseneck Barnacle		
Thatched Acorn Barnacle		
<b><i>Crabs</i></b>		

<b>Date</b>		
Dungeness Crab		
Black-clawed Cancer Crab		
Red Hermit Crab		
Striped Hermit Crab		
Decorator Crab		
Carapace Crab		
Red King Crab		
Northern Kelp Crab		
Helmet Crab		
<b>Shrimp</b>		
Broken-back Shrimp		
Coonstripe Shrimp		
Sand Shrimp		
<b>Isopods</b>		
Pillbug Isopod		
Rockweek Isopod		
<b>Amphipods</b>		
Skeleton Shrimp		
Small Beach Hopper		
<b>Echinoderms</b>		
<b>Sea Stars</b>		
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		
<b>Brittle Stars</b>		
Serpent Star		
Daisy Brittle Star		
<b>Sea Urchins</b>		
Green Sea Urchin		

<b>Date</b>		
Red Sea Urchin		
<b>Sea Cucumbers</b>		
Silky Burrowing Cucumber		
Orange Cucumber (Red Cucumber)		
Tar-spot Cucumber (Black Cucumber)		
<b>Sand Dollars</b>		
Green-spined Sand Dollar (Northern Sand Dollar)		
<b><u>Chordates</u></b>		
<b>Tunicates</b>		
Colonial Tunicate (Sea Pork)		
Sea Peach		
<b><u>Seaweeds</u></b>		
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		
<b><u>Beach Substrate</u></b>		
Type		

<b>Date</b>		
<b><u>Bluff and Cliff Erosion</u></b>		
Erosion present?		
Comments		
<b><u>Human Activities</u></b>		
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		

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

<b>Date</b>		
<b><u>Outfalls or Pipes</u></b>		
Number		
Comments		
<b><u>Toxic Pollution</u></b>		
Fuel (oil, gas, etc.)		
Lubricating Oil		
Paint		
Batteries		
<b><u>Trash &amp; Debris</u></b>		
(from International Coastal Cleanup Data Card)		
<b><i>Shoreline and Recreational Activities</i></b>		
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		
<b><i>Ocean/Waterway Activities</i></b>		
Bait Containers/Packaging		
Bleach/Cleaner Bottles		
Buoys/Floats		
Crab/Lobster/Fish Traps		

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

<b>Date</b>		
Form of Entangling Debris		
Comments		
<b><i>Most Peculiar Item Collected?</i></b>		
<b><i>Comments</i></b>		
<b><u>Additional Observations and Comments</u></b>	worsening.	