

Zone 2

Shore	north
Total Surveys	8
Start Point	Diamond Creek
End Point	Point
Dates Walked	1989-92, 98, 2001, 2004, 2005, 2006
Spring Surveys	6
Fall Surveys	5
First Walked	1989
Last Walked	2006
Total Person-Hours	129.5
Total Trash Bags Collected	12
Total Estimated Weight of Trash Collected	125

General Info

Date	29-Apr to 6-May-89	29-Apr-90	4-May-90	28-Apr-91	5-May-91	19-May-92	23-Sep-98	16-Sep-01
Start Time		1113	1430	1000	1200		930	900
End Time		1313	1830	1630	1500		1230	1430
Lowest Tide								-3
	at time							820
Temperature (F)							50	50
Sky							cloudy	cloudy
Vertical Zones Walked:								
	High							x
	Middle							x
	Low							x
# of Observers	1	2	2	6	2	2	13	2
Hours Spent	1	2	4	6.5	3	4	3	5.5
Person-Hours	1	4	8	39	6	8	39	11
Shoreline Walked (miles)			4	4			2.5	2.5
Total Trip Mileage								5
Did Observers . . .								
	Hike?	x	x	x	x	x	x	x
	Kayak?							

Date	29-Apr to 6-May-89	29-Apr-90	4-May-90	28-Apr-91	5-May-91	19-May-92	23-Sep-98	16-Sep-01
Other (specify)?								
Trash Bags Collected			2		2			2
Estimated Weight of Collected Trash								25
<u>Wildlife</u>								
<i>Birds</i>								
Loons		9		20				2
Sea Ducks		312	8	116	25		20	11
Other Ducks and Geese								
Bald Eagles								
	Adults	3	2	12	2	1	1	3
	Immatures	16	1	5	1	1		1
	Nests			1	1	4		
Shorebirds								3
Seabirds		129	106	195	75		20	50
Crows and Ravens		25		23	10	50	4	
Others (see separate Bird list)		3	8	21	2	1	2	
<i>Domestic Mammals</i>								
Cattle								
Horses								
Dogs						1	2	2
Other								
<i>Land Mammals</i>								
Moose								
	Adults				1		1	
	Calves							
Black Bears							2	
Brown Bears								
Land/River Otters								
Red Squirrels					1		2	
Tracks Identified		1				mouse	fox, moose	
Other								
<i>Marine Mammals</i>								
Sea Otters		2		40	1		2	46
Harbor Seals				2				1

Date 29-Apr to 6-May-89 29-Apr-90 4-May-90 28-Apr-91 5-May-91 19-May-92 23-Sep-98 16-Sep-01

Beach Substrate
 Type rocky, pebl sand all rocky sand

Bluff and Cliff Erosion
 Comments Erosion Present severe severe severe moderate Active rock

Human Activities

Walking	Signs of Actual observation				1		1		3
Camping	Signs of Actual observation								1
Partying	Signs of Actual observation		1						
Fire Pits	Signs of Actual observation								1
Trash Accumulations	Signs of Actual observation						1		
Clamming	Signs of Actual observation		1						
Fishing	Signs of Actual observation								
Coaling	Signs of Actual observation								
Picnicking	Signs of Actual observation						1		

Date		29-Apr to 6-May-89	29-Apr-90	4-May-90	28-Apr-91	5-May-91	19-May-92	23-Sep-98	16-Sep-01
	Signs of Actual observation								
Horseback Riding									
	Signs of Actual observation							1	
Harvesting (specify)									
	Signs of Actual observation								
Other (specify)									

Vehicle Use

Cars/Trucks	Sets of tracks Actual observation								1
ATVs/Motorcycles	Sets of tracks Actual observation		20			1			2
Bicycles	Sets of tracks Actual observation							1	
Aircraft	Sets of tracks Actual observation								
Other (specify)									

Structures on the Beach

Buildings									
Docks									
Driftwood Structures									1
Riprapped Areas									
Erosion Control Structures									
Abandoned Vehicles									1
Abandoned Boats	Boat Parts		1						

Date 29-Apr to 6-May-89 29-Apr-90 4-May-90 28-Apr-91 5-May-91 19-May-92 23-Sep-98 16-Sep-01

Archaeological Sites

Shell Middens
Other (specify)

Outfalls or Pipes

Number
Comments

Toxic Pollution

Fuel (oil, gas, etc.)			
Lubricating Oil			1
Paint			
Batteries			

Trash & Debris

(from International Coastal Cleanup Data Card)

Shoreline and Recreational Activities

Bags/Food Wrappers	2	1	6
Balloons			
Beverage Bottles, plastic, 2-liter or less		12	12
Beverage Bottles, glass			13
Beverage Cans			4
Caps, Lids			20
Clothing, Cloth			4
Cups, Plates, Forks, Knives, Spoons			
Diapers			
Fast-food Containers		3	1
6-pack Holders			
Pull Tabs			
Shotgun Shells/Wadding			
Straws, Stirrers			
Toys			1

Ocean/Waterway Activities

Bait Containers/Packaging			1
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Date

29-Apr to 6-May-89 29-Apr-90 4-May-90 28-Apr-91 5-May-91 19-May-92 23-Sep-98 16-Sep-01

Entangled Animals

Type of Animal

Form of Entangling Debris

Comments

Most Peculiar Item Collected?

computer r

Comments

Aluminum cans, plastic Aluminum, glass bottle

Additional Observations and Comments

Heavy erosion continues on the bluff, in substantial mud and rock slides. Large dr

Date		10.3.04	09.24.05	09.30.06
	Other (specify)?			
Trash Bags Collected		2	2	2
Estimated Weight of Collected Trash		25	50	25
<u>Wildlife</u>				
<i>Birds</i>				
Loons		3	0	
Sea Ducks		37	37	11
Other Ducks and Geese			0	
Bald Eagles				
	Adults		1	
	Immatures			
	Nests			
Shorebirds		2	0	
Seabirds		96	51	25
Crows and Ravens			2	x
Others (see separate Bird list)			5	x
<i>Domestic Mammals</i>				
Cattle			0	
Horses			0	
Dogs		1	2	1
Other			0	
<i>Land Mammals</i>				
Moose				
	Adults		0	
	Calves		0	
Black Bears			0	
Brown Bears			0	
Land/River Otters			0	
Red Squirrels			0	
Tracks Identified			0	
Other			1 fox	
<i>Marine Mammals</i>				
Sea Otters		4	1	
Harbor Seals		6	20	44

Date	10.3.04	09.24.05	09.30.06
Steller's Sea Lions		0	
Harbor Porpoises		0	
Whales			
	Beluga	0	
	Orca	0	
	Minke	0	
	Humpback	0	
	Gray	0	
	Unknown	0	
Other/Unidentified		0	
	Dead Sea otters		1
	Other dead marine mammals		1

Please note any unusual wildlife sightings

seal haul out

Invertebrates

(from the Intertidal Biodiversity Checklist)

Please note any interesting observations or changes in abundance here

Sponges

Breadcrumb Sponge
Purple Sponge

Cnidarians

Anemones

Burrowing Green Anemone
Orange Colonial Anemone
Frilled (Plumose) Anemone
Christmas Anemone

Sea Jellies

Moon Jelly
Many-ribbed Hydromedusa
Compass Jelly
Lion's Mane Jelly

x x

Date 10.3.04 09.24.05 09.30.06

Worms

Giant Flatworm

Nemerteans

Amphiporus (Two-spotted) Ribbon Worm

Red Ribbon Worm

Echiurans

Fat Innkeeper (Alaskan Spoonworm)

Sipunculids

Peanut Worm

Annelids

Mussel Worm (Clam Worm)

Northern Feather Duster Worm (Carpet Worm)

Cone Worm

Calcareous Tube Worm

Spiral Tube Worm

Scaleworm

Brachiopods

Transverse Lampshell

Mollusks

Chitons

Gumboot Chiton

Black Katy Chiton

Brick Chiton

Mossy Chiton

Tiger Chiton

Lined Chiton

Limpets

Dunce Cap Limpet

x

Plate Limpet

Snails

Hairy Triton

Sitka Periwinkle

Helicina Margarite

Puppet Margarite

Aleutian Moonsnail

Ridged Neptune

Date	10.3.04	09.24.05	09.30.06
Channeled Dogwinkle			
Emarginate Dogwinkle			
Frilled Dogwinkle			
File Dogwinkle			
Big-mouth Whelk			
Nudibranchs			
Maned Nudibranch			
False Sea Lemon (False Lemon Peel)			
Orange-tipped Nudibranch			
Opalescent Nudibranch			
Bushy-backed Nudibranch			
Little Brown Nudibranch			
Clams		x	
Nuttal's Cockle			
Northwest Ugly Clam			
Arctic Rock Borer			
Baltic Macoma			
Stained Macoma			
Pacific Surf Clam	x		
Truncated Mya			
Steamer Clam (Pacific Littleneck Clam)			
Butter Clam			
Razor Clam			
Mussels		x	x
Horse Mussel			
Pacific Blue Mussel	x		
Scallops			
Pink Scallop			
Jingles			
Rock Jingle			
Cephalopods			
Giant Pacific Octopus			
Stubby Squid			
Arthropods			
Barnacles		x	x
Acorn Barnacle			

Date	10.3.04	09.24.05	09.30.06
Pelagic Gooseneck Barnacle	x		
Thatched Acorn Barnacle	x		
Crabs			x
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			x
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			

Date 10.3.04 09.24.05 09.30.06

Daisy Brittle Star

Sea Urchins

Green Sea Urchin

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)

Chordates

Tunicates

Colonial Tunicate (Sea Pork)

Sea Peach

Seaweeds

Green Seaweed

Band Attached x x x
Washed Up

Red Seaweed

Band Attached x x x
Washed Up

Rockweed

Band Attached x
Washed Up

Kelps

Band Attached x x x
Washed Up

Eelgrass

Band Attached x
Washed Up

Date 10.3.04 09.24.05 09.30.06

Beach Substrate

Type Rocky ebbles, sand cobble

Bluff and Cliff Erosion

Erosion Present

Comments des, many edge many tions. Gullies below Overlook Park are eroding more yes

Human Activities

Walking	Signs of Actual observation	2	x
Camping	Signs of Actual observation		x
Partying	Signs of Actual observation		
Fire Pits	Signs of Actual observation	1	x
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		

Date		10.3.04	09.24.05	09.30.06
	Signs of Actual observation			
Horseback Riding				
	Signs of Actual observation			
Harvesting (specify)				
	Signs of Actual observation			
Other (specify)				

Vehicle Use

Cars/Trucks	Sets of tracks Actual observation		2 1	1
ATVs/Motorcycles	Sets of tracks Actual observation			1 1
Bicycles	Sets of tracks Actual observation			
Aircraft	Sets of tracks Actual observation			
Other (specify)				

Structures on the Beach

Buildings		3	1	2
Docks				
Driftwood Structures				
Riprapped Areas				
Erosion Control Structures				
Abandoned Vehicles	chassis (ol		1	1
Abandoned Boats	Boat Parts			

Date 10.3.04 09.24.05 09.30.06

Archaeological Sites

Shell Middens

Other (specify)

Outfalls or Pipes

Number

Comments

Toxic Pollution

Fuel (oil, gas, etc.)

Lubricating Oil

Paint

Batteries

Trash & Debris

(from International Coastal Cleanup Data Card)

Shoreline and Recreational Activities

Bags/Food Wrappers		3		12
Balloons				0
Beverage Bottles, plastic, 2-liter or less	26	63	35	148
Beverage Bottles, glass				13
Beverage Cans	5	1	25	35
Caps, Lids	3	8		31
Clothing, Cloth	6	1		11
Cups, Plates, Forks, Knives, Spoons				0
Diapers				0
Fast-food Containers	5	8	4	21
6-pack Holders				0
Pull Tabs				0
Shotgun Shells/Wadding	1			1
Straws, Stirrers				0
Toys	1	2		4

Ocean/Waterway Activities

Bait Containers/Packaging		5	2	8
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Date	10.3.04	09.24.05	09.30.06	
Bleach/Cleaner Bottles			1	3
Buoys/Floats	2	5	1	17
Crab/Lobster/Fish Traps			1	1
Crates		3		3
Fishing Line			1	2
Fishing Lures	2	3		12
Fishing Nets				1
Light Bulbs/Tubes				0
Oil/Lube Bottles	1			4
Pallets			7	9
Plastic Sheeting/Tarps				5
Rope	2	4	3	15
Strapping Bands			1	1
				0
<i>Smoking-Related Activities</i>				0
Cigarettes/Cigarette Filters				0
Cigarette Lighters				1
Cigar Tips				0
Tobacco Packaging/Wrappers	1			1
				0
<i>Dumping Activities</i>				0
Appliances (refrigerators, washers, etc.)				0
Batteries				0
Cars/Car Parts		1		5
Construction Materials	34		8	43
55-gallon Drums				2
Tires				0
				0
<i>Medical/Personal Hygiene</i>				0
Syringes				0
Condoms				0
Tampons/Tampon Applicators				0
				0
<i>Debris Items of Local Concern</i>				0
Styrofoam			100	100
Treated Lumber			8	8

Date	10.3.04	09.24.05	09.30.06		
<i>Entangled Animals</i>					0
Type of Animal					0
Form of Entangling Debris					0
Comments					0
<i>Most Peculiar Item Collected?</i>	monitor, Asian and Russian bottles, Asian Amway bottle from suspect container spill				
<i>Comments</i>	sglass in... throughed lumber toxic?				
<u>Additional Observations and Comments</u>	rifoood collections of large logs present near s. end of unit 2 are completely gone - no log piles				

Zone 2

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

General Info

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

Shoreline Walked (miles)

Total Trip Mileage

Did Observers . . .

Hike?
Kayak?

Date

Other (specify)?

Trash Bags Collected

Estimated Weight of Collected Trash

Wildlife

Birds

Loons

Sea Ducks

Other Ducks and Geese

Bald Eagles

Adults

Immatures

Nests

Shorebirds

Seabirds

Crows and Ravens

Others (see separate Bird list)

Domestic Mammals

Cattle

Horses

Dogs

Other

Land Mammals

Moose

Adults

Calves

Black Bears

Brown Bears

Land/River Otters

Red Squirrels

Tracks Identified

Other

Marine Mammals

Sea Otters

Harbor Seals

Date

Steller's Sea Lions

Harbor Porpoises

Whales

Beluga

Orca

Minke

Humpback

Gray

Unknown

Other/Unidentified

Dead Sea otters

Other dead marine mammals

Please note any unusual wildlife sightings**Invertebrates***(from the Intertidal Biodiversity Checklist)****Please note any interesting observations or
changes in abundance here******Sponges***

Breadcrumb Sponge

Purple Sponge

Cnidarians***Anemones***

Burrowing Green Anemone

Orange Colonial Anemone

Frilled (Plumose) Anemone

Christmas Anemone

Sea Jellies

Moon Jelly

Many-ribbed Hydromedusa

Compass Jelly

Lion's Mane Jelly

Date

Worms

Giant Flatworm

Nemertean

Amphiporus (Two-spotted) Ribbon Worm

Red Ribbon Worm

Echiurans

Fat Innkeeper (Alaskan Spoonworm)

Sipunculids

Peanut Worm

Annelids

Mussel Worm (Clam Worm)

Northern Feather Duster Worm (Carpet Worm)

Cone Worm

Calcareous Tube Worm

Spiral Tube Worm

Scaleworm

Brachiopods

Transverse Lampshell

Mollusks

Chitons

Gumboot Chiton

Black Katy Chiton

Brick Chiton

Mossy Chiton

Tiger Chiton

Lined Chiton

Limpets

Dunce Cap Limpet

Plate Limpet

Snails

Hairy Triton

Sitka Periwinkle

Helicina Margarite

Puppet Margarite

Aleutian Moonshell

Ridged Neptune

Date

Channeled Dogwinkle
Emarginate Dogwinkle
Frisled Dogwinkle
File Dogwinkle
Big-mouth Whelk

Nudibranchs

Maned Nudibranch
False Sea Lemon (False Lemon Peel)
Orange-tipped Nudibranch
Opalescent Nudibranch
Bushy-backed Nudibranch
Little Brown Nudibranch

Clams

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

Mussels

Horse Mussel
Pacific Blue Mussel

Scallops

Pink Scallop

Jingles

Rock Jingle

Cephalopods

Giant Pacific Octopus
Stubby Squid

Arthropods***Barnacles***

Acorn Barnacle

Date

Pelagic Gooseneck Barnacle

Thatched Acorn Barnacle

Crabs

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

Date

Daisy Brittle Star

Sea Urchins

Green Sea Urchin

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)

Chordates

Tunicates

Colonial Tunicate (Sea Pork)

Sea Peach

Seaweeds

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

Date

Beach Substrate

Type

Bluff and Cliff Erosion

Erosion Present

Comments

Human Activities

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

Date

	Signs of Actual observation
Horseback Riding	
	Signs of Actual observation
Harvesting (specify)	
	Signs of Actual observation
Other (specify)	

Vehicle Use

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)	

Structures on the Beach

Buildings	
Docks	
Driftwood Structures	
Riprapped Areas	
Erosion Control Structures	
Abandoned Vehicles	
Abandoned Boats	
	Boat Parts

Date

Archaeological Sites

Shell Middens

Other (specify)

Outfalls or Pipes

Number

Comments

Toxic Pollution

Fuel (oil, gas, etc.)

Lubricating Oil

Paint

Batteries

Trash & Debris

(from International Coastal Cleanup Data Card)

Shoreline and Recreational Activities

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

Ocean/Waterway Activities

Bait Containers/Packaging

Date

Bleach/Cleaner Bottles
Buoys/Floats
Crab/Lobster/Fish Traps
Crates
Fishing Line
Fishing Lures
Fishing Nets
Light Bulbs/Tubes
Oil/Lube Bottles
Pallets
Plastic Sheeting/Tarps
Rope
Strapping Bands

Smoking-Related Activities

Cigarettes/Cigarette Filters
Cigarette Lighters
Cigar Tips
Tobacco Packaging/Wrappers

Dumping Activities

Appliances (refrigerators, washers, etc.)
Batteries
Cars/Car Parts
Construction Materials
55-gallon Drums
Tires

Medical/Personal Hygiene

Syringes
Condoms
Tampons/Tampon Applicators

Debris Items of Local Concern

Styrofoam
Treated Lumber

Date

Entangled Animals

Type of Animal

Form of Entangling Debris

Comments

Most Peculiar Item Collected?

Comments

Additional Observations and Comments