

Zone 13

Shore north
Total Surveys 16
Start Point Miller's Landing
Start Lat/Long
End Point Fritz Creek
End Lat/Long
Dates Walked 1984, 88-91, 96, 98-2004,07-09
Spring Surveys 9
Fall Surveys 17
First Walked 1984
Last Walked 2016
Total Person-Hours 331.7
Total Trash Bags Collected 40.5
Total Estimated Weight of Trash Collected 283.5

General Info

Date 21-Apr-84 30-Apr-88 30-Apr-88 30-Apr-88 29-Apr to 6
Start Time
End Time
Lowest Tide

at time

Temperature (F)

Sky

Vertical Zones Walked:

| | | | | | | |
|---------------------------------|------------------|---|----|-----|-----|------|
| | High | x | x | | | |
| | Middle | | | x | x | |
| | Low | | | x | x | |
| # of Observers | | 2 | 4 | 2 | 7 | 6 |
| Hours Spent | | 3 | 3 | 3.5 | 3 | 2 |
| Person-Hours | | 6 | 12 | 7 | 21 | 12 |
| Shoreline Walked (miles) | | 3 | 6 | 3 | 3.5 | 0.75 |
| Total Trip Mileage | | | | 6 | | |
| Did Observers . . . | | | | | | |
| | Hike? | x | x | x | | x |
| | Kayak? | | | | | |
| | Other (specify)? | | | | | |

Trash Bags Collected

Estimated Weight of Collected Trash

1

Wildlife

Birds

| | | | | | | |
|-----------------------|-----------|-----|---|----|----|---|
| Loons | | 1 | 3 | | | |
| Sea Ducks | | 250 | 8 | | 2 | |
| Other Ducks and Geese | | | | 24 | | |
| Bald Eagles | | | | | | |
| | Adults | 2 | 4 | 2 | 5 | 1 |
| | Immatures | | | 2 | 1 | |
| | Nests | | 1 | | | |
| Shorebirds | | | 2 | | 50 | |

| | | | | | |
|---------------------------------|----|----|------|-----|-----|
| Seabirds | 8 | 50 | 3000 | 301 | 200 |
| Crows and Ravens | | | 2 | | |
| Others (see separate Bird list) | 40 | 1 | 2 | | |

Domestic Mammals

| | | | | | |
|--------|---|--|---|--|--|
| Cattle | | | | | |
| Horses | | | | | |
| Dogs | 1 | | 3 | | |
| Other | | | | | |

Land Mammals

| | | | | | |
|-------------------|---|--------|---|---|---|
| Moose | | | | | |
| | | Adults | 1 | 1 | 1 |
| | | Calves | | | |
| Black Bears | | | | | |
| Brown Bears | | | | | |
| Land/River Otters | | | | | |
| Red Squirrels | | | 1 | | |
| Tracks Identified | | | | | |
| Other | 1 | | | | |

Marine Mammals

| | | | | | |
|---------------------|--|----------|---|---|--|
| Sea Otters | | | | | |
| Harbor Seals | | 5 | | 4 | |
| Steller's Sea Lions | | | | | |
| Harbor Porpoises | | | | | |
| Whales | | | | | |
| | | Beluga | | | |
| | | Orca | 5 | | |
| | | Minke | | | |
| | | Humpback | | | |
| | | Gray | | | |
| | | Unknown | | 7 | |
| Other/Unidentified | | | | | |

Please note any unusual wildlife sightings 1 harbor seal skeleton Whales are 10 or more

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

x

Sea Jellies

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

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

Plate Limpet

Snails

Hairy Triton

Sitka Periwinkle

Helicina Margarite

Puppet Margarite

Aleutian Moonshell

Ridged Neptune

Channeled Dogwinkle

Emarginate Dogwinkle

Friiled Dogwinkle

File Dogwinkle

Big-mouth Whelk

Nudibranchs

Maned Nudibranch

False Sea Lemon (False Lemon Peel)

Orange-tipped Nudibranch

Opalescent Nudibranch

Bushy-backed Nudibranch

Clams

x

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
Razor Clam

Mussels

x x x

Horse Mussel
Pacific Blue Mussel

Scallops

Pink Scallop

Jingles

Rock Jingle

Cephalopods

Giant Pacific Octopus
Stubby Squid

Arthropods

Barnacles

x

Acorn Barnacle
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
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 |

Beach Substrate

Type sand, mud

Bluff and Cliff Erosion

Comments Erosion present severe

x

Human Activities

| | | | | | |
|----------------------|--------------------------------|----|---|---|---|
| Walking | Signs of Actual observation | | | | 1 |
| Camping | Signs of Actual observation | 1 | | 2 | |
| Partying | Signs of Actual observation | | | | |
| Fire Pits | Signs of Actual observation | | | | |
| Trash Accumulations | Signs of Actual observation | | | | |
| Clamming | Signs of Actual observation | 1 | | | |
| Fishing | Signs of Actual observation | 12 | 7 | 3 | 1 |
| Coaling | Signs of Actual observation | | | | |
| Picnicking | Signs of Actual observation | | | | |
| Horseback Riding | Signs of Actual observation | | | | |
| Harvesting (specify) | Signs of Actual observation | | 3 | | |
| Other (specify) | Signs of Actual observation | | | | |

Vehicle Use

| | | | | | |
|------------------|--------------------------------------|---|---|---|--|
| Cars/Trucks | Sets of tracks Actual observation | 1 | | 3 | |
| ATVs/Motorcycles | Sets of tracks Actual observation | | 4 | | |
| Bicycles | Sets of tracks Actual observation | | | | |
| Aircraft | Sets of tracks Actual observation | | | | |
| Other (specify) | Sets of tracks Actual observation | | | | |

Structures on the Beach

| | | | |
|----------------------------|---|---|---|
| Buildings | 6 | | |
| Docks | | 2 | |
| Driftwood Structures | | | |
| Riprapped Areas | | | |
| Erosion Control Structures | | | |
| Abandoned Vehicles | | | 1 |
| Abandoned Boats | | 1 | |
| Boat Parts | | | |

Archaeological Sites

Shell Middens
Other (specify)

Outfalls or Pipes

| | | | |
|----------|---|---|---|
| Number | 2 | 1 | 1 |
| Comments | | | |

Toxic Pollution

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

Trash & Debris

(from International Coastal Cleanup Data Card)

Shoreline and Recreational Activities

| | |
|--------------------------------------------|---|
| Bags (Paper & Plastic) | |
| Balloons | |
| Beverage Bottles, plastic, 2-liter or less | |
| Beverage Bottles, glass | |
| Beverage Cans | 1 |
| Caps, Lids | |
| Clothing, Cloth | |
| Cups, Plates, Forks, Knives, Spoons | |
| Food Wrappers/Containers | |
| 6-pack Holders | |
| Pull Tabs | |
| Shotgun Shells/Wadding | |
| Straws, Stirrers | |
| Toys | |

Ocean/Waterway Activities

| | |
|---------------------------|---|
| Bait Containers/Packaging | |
| Bleach/Cleaner Bottles | |
| Buoys/Floats | 2 |
| Crab/Lobster/Fish Traps | 2 |
| Crates | |
| Fishing Line | |
| Fishing Lures | |

| | | |
|------------------------|---|---|
| Fishing Nets | 1 | 1 |
| Light Bulbs/Tubes | | |
| Oil/Lube Bottles | | |
| Pallets | | |
| Plastic Sheeting/Tarps | | |
| Rope/cable | | |
| Strapping Bands | | |

Smoking-Related Activities

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

Dumping Activities

| | | |
|-------------------------------------------|---|---|
| Appliances (refrigerators, washers, etc.) | | |
| Batteries | | |
| Building Materials | | |
| Cars/Car Parts | | 2 |
| 55-gallon Drums | 1 | |
| Tires | | |

Medical/Personal Hygiene

Condoms
 Diapers
 Syringes
 Tampons/Tampon Applicators

Debris Items of Local Concern

Styrofoam Pieces
 Plastic Pieces
 Paper products
 Metal Pieces
 Other

Entangled Animals

Type of Animal
 Form of Entangling Debris
 Comments

Most Peculiar Item Collected?

Comments

Glass, metal, plastic, fi Plastics an Glass and j

Additional Observations and Comments

The beach showed relatively few ε There were thousands

| 4-May-90 | 4-May-90 | 28-Apr-91 | 4-May-91 | 29-Sep-96 | 24-Sep-98 | 28-Sep-98 | 23-Sep-99 | 28-Sep-00 |
|----------|----------|-----------|----------|-------------|-------------|-------------|---------------|-------------|
| 1100 | | 1100 | 1130 | 1400 | 1100 | 1500 | 1645 | 1030 |
| 1500 | | 1500 | 1330 | 1530 | 1330 | 1600 | 1845 | 1230 |
| 2.6 | 2.6 | -2.5 | 1.6 | | | | | |
| 1801 | 1801 | 901 | 1238 | | | | | |
| | | | | 48 sunny | 40 sunny | 60 sunny | 50s cloudy | 40 sunny |
| | | | | x | | | | x |
| | | | | | | | x | x |
| | | | | | | | x | |
| 2 | 3 | 6 | 1 | 3 | 2 | 1 | 1 | 1 |
| 4 | 5 | 4 | 2 | 1.5 | 2.5 | 1 | 2 | 2 |
| 8 | 15 | 24 | 2 | 4.5 | 5 | 1 | 2 | 2 |
| | 6 | 2 | 2 | 1.5 | 4 | 2 | 4 | 2 |
| | | | 4 | | | | | |
| x | | x | x | x | x | x | x | x |
| 1 | 2 | 1 | | | 1 | | | |
| | 50 | | 100 | | | | 2 | |
| | | 6 | | | | | 2 | |
| 6 | 4 | 6 | 21 | | 1 | | | |
| 3 | 1 | 1 | 6 | | | | 1 | |

| | | | | | | | | |
|----|----|----|-----|--|----|-----|-----|----|
| 53 | 50 | 81 | 100 | | 20 | 400 | 198 | |
| | 3 | | 12 | | | | | 50 |
| | | 4 | 4 | | 1 | | | 2 |

| | | | | | | | | |
|---|---|---|---|---|---|--|--|--|
| 1 | 1 | 1 | 3 | 1 | 4 | | | |
| | | | 2 | | | | | |

1

human, ho
moose

horse, dog
1

1
moose

1
3

3
1

1
1

1 moose c: 1 dead moose. Small white roe or 1 dead gull.

Normally there isn't mu billions of tiny pink clams.

x

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pebble, sandy rocky, pebbles mud pebbles, sandy rocky, pebbles rocky, sand all pebbles pebble, muddy

severe to moderate severe moderate severe slight moderate slight, about moderate slight

1
1

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2
1

1 1 1 1 2 2 2
1 1 1 1 1 1 2

5

5

Lots of craj Glass, met: Glass, plas Subsistenc There seemed to be slightly less gæ Metal comr Very clean

The only thing I can think of for improving Coæ The beach This sector Good condi Little direct Very clean.

| 20-Sep-01 | 4-Oct-02 | 9.14.03 | 9.16.04 | 09.30.06 | 09.15.06 | 9.19.07 | 9.14.07 | 9.2008 |
|-------------|----------|---------|-----------|----------|----------|---------|---------|--------|
| 1015 | 1000 | 1030 | 945 | 9:15 | 1100 | 1230 | 1000 | 1120 |
| 1230 | 1400 | 1400 | 1130 | 1410 | 1430 | 1530 | 1400 | 1300 |
| -2.2 | | 1.7 | | 3.9 | 1.5 | 8.8 | 1 | -0.6 |
| 1134 | | 1100 | | 1:55pm | 1:55pm | 1337 | 1000 | 751 |
| high 50s | 50s | | | | 50 | | 58 | 52 |
| partly sunn | sunny | sunny | p. cloudy | sunny | cloudy | sun | clouds | sun |
| | | x | | x | | | x | x |
| x | | x | | x | x | | x | x |
| x | x | | x | x | x | x | | |
| 2 | | 3 | 4 | 2 | 18 | 1 | 12 | 2 |
| 2.25 | 2 | 3.5 | 1.75 | 5 | 3.5 | 2.5 | 3 | 2 |
| 4.5 | 0 | 10.5 | 7 | 10 | 63 | 2.5 | 36 | 4 |
| 3 | 2.75 | 3.5 | 3 | 1.5 | 2 | 3 | 1 | 2 |
| 6 | 5.5 | 4 | 6 | 3.5 | 4 | 6 | 2 | |
| x | x | x | x | x | x | x | x | x |
| 1 | 1 | 1 | 0.5 | 2 | 1 | 0 | 2 | |
| 2 | 20 | ? | 2 | 10 | 20 | | 40 | |
| 3 | 2 | 0 | | 1 | | | 1 | |
| | | 0 | | 1 | 23 | 90 | 32 | |
| 50 | | 0 | | 1 | | | 3 | |
| 2 | 6 | 0 | 3 | 2 | 1 | | 2 | |
| | 1 | 0 | | | | | 2 | |
| | | 0 | 1 | | 1 | | 2 | |
| | | 0 | | | | | | |

| | | | | | | | | |
|----|----|---|---|---|-----------------|----|-----|-----|
| 7 | | 0 | | 1 | | 1 | 100 | 35 |
| | | 0 | | 1 | | | | 100 |
| 40 | | 2 | | | | | 3 | 1 |
| | | 0 | | | | | | |
| | | 0 | | | | | | |
| | 3 | 0 | 1 | 2 | | 1 | | |
| | | 0 | | | | | | |
| | | | | | | | | |
| 2 | | 0 | | | moose vertebrae | | | |
| | | 0 | | | | | | |
| | | 0 | | | | | | |
| | | 0 | | | | | | |
| | | 0 | | | | | | |
| | | 0 | | | | | 2 | |
| | | 0 | | | | | | 1 |
| | | 0 | | | | | | 1 |
| 12 | 7 | 0 | | | | | | |
| | 10 | 1 | 8 | | | 17 | | |
| | | 0 | | | | | | |
| | | 0 | | | | | | |
| | | 0 | | | | | | |
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| | | 0 | | | | | | |
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| | | 0 | | | | | | |
| | | 0 | | | | | | |
| | | 0 | | | | | | |

Numerous shorebird species in spring; few species throughout the summer. Large #s of loons in spring

Soft-shelled clam present.

x

x

2

x

x

x

x

x

x

x

x

x

x

x

x

shells

x

x
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x

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shells
shells
shells

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x

x

x

x

x

x

rocky, pebbt rocky, muddy=rocky any, pebbles, cobble sand mud sand, mud bble, bould

There was (rom miller's)e), Seaside zone is duway, vegetation disturbed or non-existent yes yes yes yes yes active seeps

1 some 0
2 3 2

0
0

0
0

0 1
0

0
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4 0
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 some 0
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x

x

| | | | | | | | |
|---|-------------|------------|---|---|----|---|---|
| 1 | 1 | ashed up d | 1 | x | | | 4 |
| | | | 1 | x | | | 2 |
| | | | 3 | | 15 | | 1 |
| | | | 1 | x | 15 | | 2 |
| | old tractor | 1 | | x | | | |
| | | | | | | 1 | |

| | | |
|---|---|---|
| 3 | 4 | 2 |
|---|---|---|

x

| | | | | | | | |
|---|---|---|---|----|----|---|---|
| | | 1 | | 10 | 1 | | |
| | | 0 | | | | | |
| | 2 | 0 | | 2 | | | 1 |
| | | 0 | | | 1 | x | |
| 2 | | 2 | 2 | 2 | 1 | | 3 |
| | 2 | 0 | | | | | |
| | | 0 | | 1 | | | 1 |
| | | 0 | | | 1 | | |
| | | 0 | | 1 | 11 | | 3 |
| | | 0 | | | | | |
| | | 0 | 1 | 1 | | | |
| | | 0 | | | | | |
| | | 0 | | | | | |

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|---|---|---|---|---|---|---|---|
| | | 0 | | | | | |
| | | 0 | | | | | |
| 2 | 2 | 0 | | 2 | 1 | x | 6 |
| | | 0 | | 1 | | | |
| | 2 | 0 | 1 | | | | |
| | | 0 | | | | | |
| 2 | | 0 | | | | | |

| | | | | | | | |
|----|---|---|---|------|----|---|---|
| 1 | | 0 | | 2 | 2 | x | 3 |
| | | 0 | | | | | |
| | | 0 | | | | | |
| 2 | 1 | 0 | 1 | 2 | | | |
| | 1 | 0 | | | | | |
| | 1 | 2 | | many | 11 | | 3 |
| | | 0 | | | | | |
| | | 0 | | | | | 2 |
| | | 0 | | | | | |
| | | 0 | | 1 | | | |
| 1 | | 0 | | | | | |
| | | 0 | 1 | | | | |
| 10 | | 3 | | | 3 | | |
| 2 | | 1 | | 1 | 1 | | 3 |
| | | 0 | | | | | |
| | | 0 | 4 | 4 | | | 2 |
| | | 0 | | | | | |
| | | 0 | | | | | |
| | | 0 | | | | | |
| | | 0 | | | | | |
| | | | | 1 | 5 | | |
| | | 3 | 4 | | | | |
| | | 2 | | 8 | | | 2 |

found, but not collected a sheet - in very good condition after it was washed - gave
The area walked was exceptionally clean excluding a few very heavy large rusting items.

Rick took took digital pictures of sites along his coastwalk, and a couple of GPS

Overall the beach was in excellent The overall condition of Zone 13 is excellent very little tra repair stain

| 9.21.08 | 9.30.08 | 9.20.10 | 9.30.10 | 9.27.11 | 9/30/2012 | 10.20.12 | 9.19.15 | 10.1.15 |
|---------|---------|---------|---------------|---------|-----------|----------|---------|---------|
| 930 | 1030 | 11:15 | 1:50 | 10:40 | | | 10:50 | |
| 1400 | 1230 | 1:15 | 1:55 | 13:00 | | | 14:20 | |
| | -0.6 | 1.7 | 2.6 | -1.7 | | | 2.1 | -2.8 |
| | 932 | 7:42 | 1:12 AM | 8:46 | | | 0:22 | 23:45 |
| | 52 | 50's | 49 | | | | 51 | |
| sun | sun | clouds | partly cloudy | sun | | | sun | sun |
| x | x | | | | | | x | x |
| x | x | x | x | | | | x | x |
| 4 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 3 |
| 4 | 2 | 2 | | 2.5 | 2 | 3 | 3.5 | 2.15 |
| 13 | | 4 | | 2.5 | 4 | 6 | 7 | 6.45 |
| 1.5 | | 2.5 | 0 | 3.5 | 1 | 1.5 | 1.25 | 1 |
| 3 | | 5 | 0 | 7 | 2 | 3 | 2.5 | 2 |
| x | x | x | | x | x | x | x | x |
| 2 | 1 | 1 | 0 | 0.5 | 1 | 2 | 1 | 3 |
| | | 5 | 10 | 5 | 25 | 45 | | 39 |
| | | | | 1 | | | | |
| 404 | | 28 | | 50 | | | | |
| | | 1 | | 500 | | | | |
| 2 | 1 | | | 1 | | | 1 | 2 |
| 1 | | 1 | | | | | 1 | 1 |
| | | | | 1 | | | | |

35 15 50 1
11 5
 2

5 1

1

bear

1

2

1

18

1

19

j. Horses and dogs present in summer. 1 black bear and 1 land otter seen in sp 27 jellies

x

x

x

x
x

x

x

x

x

1 dead

x 1-75% x

x <1%
x

x
x

x 1-75% x
1-75%

er, mud sand, cobble, boulder, bedrock, boulder, mud, man-made mud

yes yes yes yes yes
s yes Fritz Creek is active erosion although this summer lots less than parallel areas re continuous along bluff, slides

x
x

x
x

3

x
x

x

x
x

x
x

x
x

x
x

1

x

x

x
x

x

x

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x
x

x

x

x

| | | | | | |
|-------------------------|---|---|---|--|---|
| | 1 | | 1 | | 1 |
| | | 1 | | | |
| x | | | 4 | | 5 |
| x | | | | | |
| one by Miller Creek, ol | | | 1 | | |

many 11 many

x (soaked in carpet)

| | | | | | | | | |
|----|---|---|---|---|---|---|---|---|
| | 6 | | 1 | | | 2 | 3 | 7 |
| | 8 | | | | 1 | | 1 | 1 |
| | 3 | | | | 9 | 3 | 3 | 3 |
| 9 | | 1 | 1 | 2 | 7 | 6 | 2 | 8 |
| | 5 | | | | 3 | | 8 | 8 |
| | 2 | | | | | 1 | 3 | |
| | | 1 | | | 2 | | 2 | 2 |
| | | | | | | | | |
| | 2 | | | | 1 | 1 | 2 | |
| | | | | | | | 2 | |
| | | | | | | | 2 | |
| 12 | | | 1 | | 2 | | | |
| | | | | | | 3 | | |

lead lines

3

3

6

1

12

1

1
8

1

2

1

1

1

1

7

60

1

1

2

3

1

2

2

3

16

29

2

19

3

3

3

1

5

1

1

3

1

:

dark blue men's skivies, very holey, would fit a man 300-350 lbs swimming
e to salvatic a rusty engine, too big to haul out
there were nets and rope to ensnare birds, bl This is an extremely clean beach due t no public access
readings, but this data/packet content was given to me a month! Late- be prepared.

way very clean, no public access. Few garbage pieces.natural erosion. Some metal f

| | | | |
|--------|---------|-------------|-------------|
| 9.9.16 | 9.13.16 | 10/1/2017 | 10.15.17 |
| 10:55 | 14:45 | ##### | 9:00 AM |
| 14:40 | 17:15 | ##### | 11:30 AM |
| 4.5 | 1.8 | 3.4 | 1.8 |
| 2:07 | 6:49 | 6:22 AM | 5:51 AM |
| 52 | 53 | 50* | 48* |
| | clouds | clouds | sun/clouds |
| | | high/middle | high/middle |
| x | x | 1 | 1 |
| x | x | 1 | 1 |
| x | | | |
| 3 | 4 | 5 | 3 |
| 3.75 | 2.5 | 2.5 | 2.5 |
| 11.25 | 10 | | |
| 1.6 | 0.9 | 1.5 | 1.25 |
| 3.2 | | 5 | 2.5 |
| | | 1 | 1 |
| 3 | 3 | 3 | 3 |
| | | 36 lbs | 16 lbs |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| 2 | | 3 | 4 |
| 3 | | 2 | 2 |
| 2 | | 1 | |
| 7 | | | |

| |
|-------|
| TOTAL |
| 13 |
| 1147 |
| 587 |
| 80 |
| 26 |
| 9 |
| 59 |

3
2
7

4711
175
120

0
3
28
0

5
1
1
0
0
4
0
4

15
109
1
0

0
5
0
0
0
7
0

9+

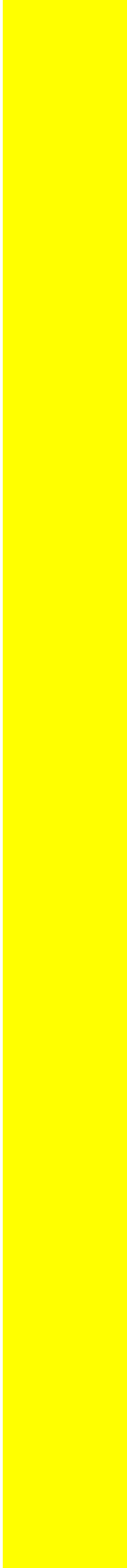
13

x

x

x

1



cobble cobble cobble cobble

yes yes, "many yes, "many areas badly eroded over the last year. Some very recent |
see photos otos in email

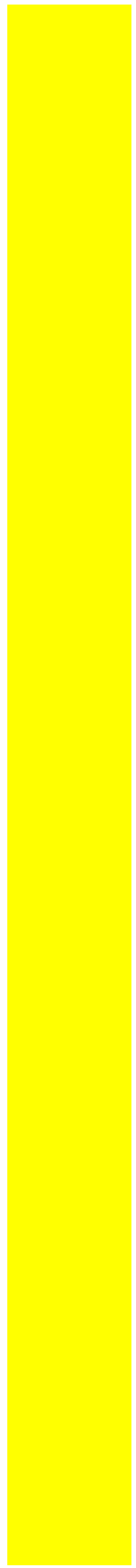
x
2 x 1 1
 1 1

x
2 x 1 1
 1 1

1 1
1 1

x 1 1
 1 1

x
2 1 1



many 5

| | | | | |
|----|----|----|---|----|
| 5 | 8 | 2 | 2 | 48 |
| | 2 | 2 | 2 | 3 |
| | 6 | 1 | 3 | 38 |
| 16 | 17 | 10 | 3 | 24 |
| 3 | 4 | 4 | | 99 |
| 2 | | 1 | | 15 |
| | 1 | 1 | | 14 |
| 3 | 2 | | | 7 |
| | | 4 | | 26 |
| | | | | 1 |
| | | | | 0 |
| | | | | 5 |
| 1 | 1 | | | 2 |
| | | | | 6 |
| | 4 | | | |
| | 1 | | | 5 |
| 1 | | | | 3 |
| | | | | 40 |
| | | | | 3 |
| | | | | 3 |
| | | | | 1 |
| | | 14 | | 2 |

| | | | | |
|----|----|-----------|-----------|-----|
| | | | | 30 |
| | | | | 0 |
| | | | | 0 |
| | | | | 9 |
| 2 | | 3 | | 6 |
| 25 | 20 | | | 88 |
| 1 | 1 | | | 4 |
| | | | | 2 |
| | | | | 0 |
| | | | | 0 |
| | | | 1 | 1 |
| | | | | 3 |
| | | 16 | | 2 |
| | | 2 | | 87 |
| | | | | 23 |
| | | | | 6 |
| | | | | 25 |
| | | | | 0 |
| | | | | 0 |
| | | | | 0 |
| | | | | 0 |
| | | 12 | 4 | |
| 13 | 7 | 4 | 5 | 106 |
| 15 | 6 | | | 30 |
| | | | | 0 |
| | | 2 | 3 | 20 |
| 9 | 12 | 78 | 23 | 39 |

2 sea otters
no
dead

golf ball and high heel shoe

2 pristine dog leashes

"seemed like less trash but so much black plastic pipe!"

s- Also some debris could have washed out due to the large tides. The same old rusting parts from boats

from boat or vehicle parts- have remained there for years.

land has come down (within 24 hours)."

exist but were undermined by the tides.