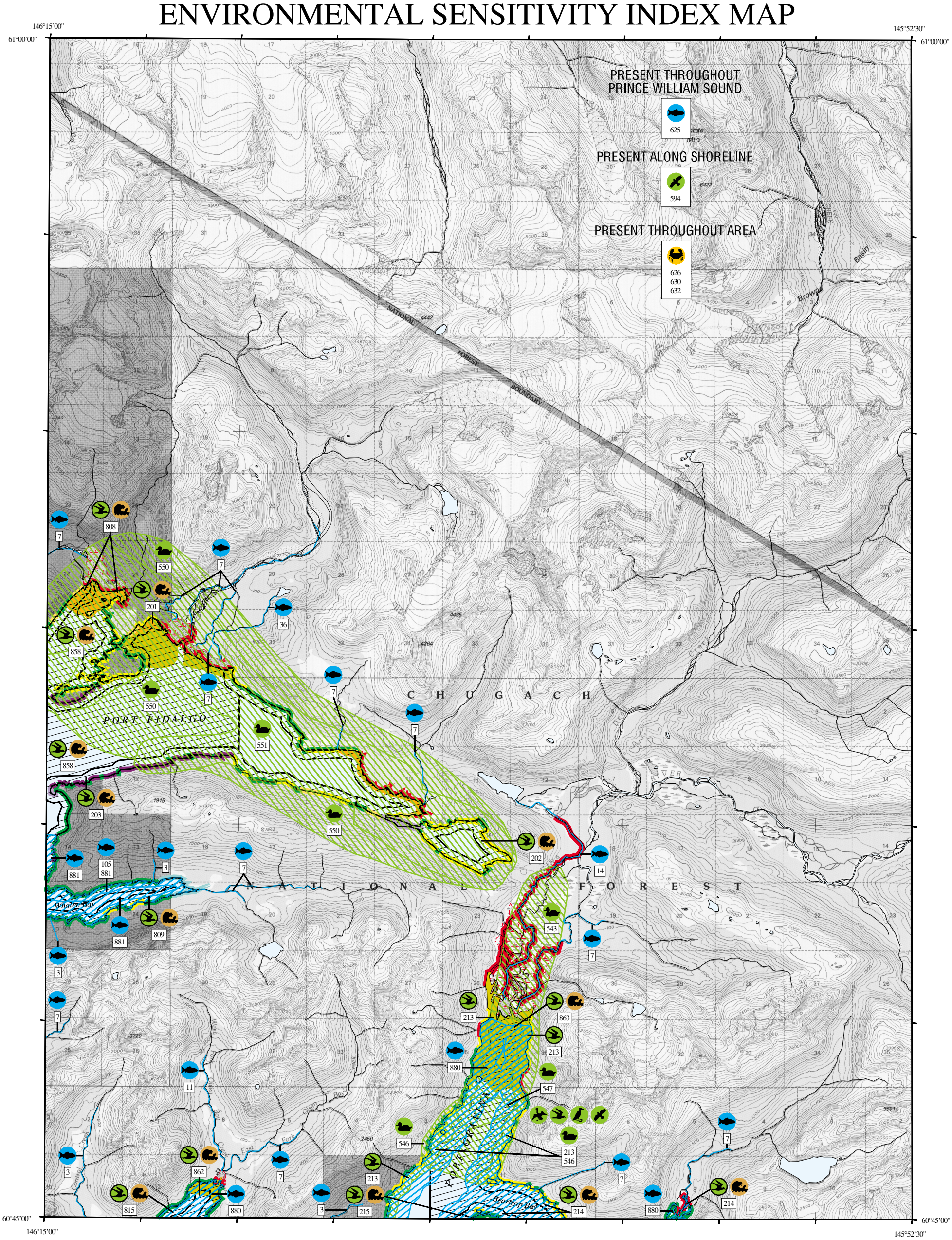
# ENVIRONMENTAL SENSITIVITY INDEX MAP




SHORELINE HABITATS

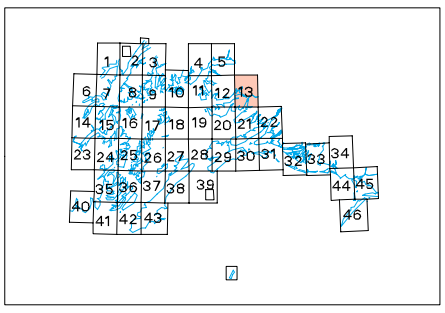
- 1A EXPOSED ROCKY SHORES
- 2A EXPOSED WAVE–CUT PLATFORMS IN BEDROCK
- 3A FINE– TO MEDIUM–GRAINED SAND BEACHES
- 4 COARSE–GRAINED SAND BEACHES (NOT PRESENT)
- 5 MIXED SAND AND GRAVEL BEACHES
- 6A GRAVEL BEACHES
- 6B RIPRAP
- 7 EXPOSED TIDAL FLATS
- 8A SHELTERED ROCKY SHORES
- 8D SHELTERED ROCKY RUBBLE SLOPES
- 9A SHELTERED TIDAL FLATS
- 10A SALT– AND BRACKISH–WATER MARSHES

N W E S

SCALE 1:87000

1 .5 0 1 KILOMETER

1 .5 0 1 MILE



Not For Navigation
Published: July 2000

Published at Seattle, Washington
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Response and Restoration
Hazardous Materials Response Division

CORDOVA (D-6), AK (1994) PWS-13

# Prince William Sound - ESIMAP 13

## BIOLOGICAL RESOURCES:

### BIRD:

| RAR# | Species | S/F | T/E | Concen | J | F | M | A | M | J | J | A | S | O | N | D | Nesting | Laying | Hatching | Fledging |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 201 | Black-legged kittiwake | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Glaucous-winged gull | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Goldeneye | | | MED | X | X | X | | | | | | | | X | X | - | - | - | - |
| | Harlequin duck | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Mallard | | | HIGH | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Mergansers | | | HIGH | X | X | X | | | | | | | | X | X | - | - | - | - |
| | Pelagic cormorant | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Scoters | | | HIGH | X | X | X | | | | | | | | X | X | - | - | - | - |
| 202 | Alcids | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | American wigeon | | | MED | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Black-legged kittiwake | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Glaucous-winged gull | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Goldeneye | | | MED | X | X | X | | | | | | | | X | X | - | - | - | - |
| | Mallard | | | HIGH | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Mergansers | | | MED | X | X | X | | | | | | | | X | X | - | - | - | - |
| | Scoters | | | LOW | X | X | X | | | | | | | | X | X | - | - | - | - |
| 203 | Goldeneye | | | MED | X | X | X | | | | | | | | X | X | - | - | - | - |
| | Mergansers | | | MED | X | X | X | | | | | | | | X | X | - | - | - | - |
| 213 | Bald eagle | | | LOW | X | X | X | X | X | X | X | X | X | X | X | X | - | - | - | - |
| | Birds | | | LOW | X | X | X | | | | | | | | X | X | - | - | - | - |
| | Black-legged kittiwake | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Canada goose | | | HIGH | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Glaucous-winged gull | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Harlequin duck | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Loons | | | LOW | X | X | X | | | | | | | | X | X | - | - | - | - |
| | Mallard | | | HIGH | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Mergansers | | | HIGH | X | X | X | | | | | | | | X | X | - | - | - | - |
| | Pelagic cormorant | | | HIGH | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Scoters | | | LOW | X | X | X | | | | | | | | X | X | - | - | - | - |
| | Surf scoter | | | MED | X | X | X | | | | | | | | X | X | - | - | - | - |
| 214 | Cormorant | | | LOW | X | X | X | | | | | | | | X | X | - | - | - | - |
| | Gulls | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Herring gull | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Mergansers | | | HIGH | X | X | X | | | | | | | | X | X | - | - | - | - |
| | Mew gull | | | MED | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Pelagic cormorant | | | MED | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Puffins | | | MED | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Storm-petrels | | | HIGH | | | | X | X | X | X | X | X | | | | - | - | - | - |
| 215 | Harlequin duck | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Mergansers | | | LOW | X | X | X | | | | | | | | X | X | - | - | - | - |
| | Scoters | | | HIGH | X | X | X | | | | | | | | X | X | - | - | - | - |
| 543 | Waterfowl | | | | | | | X | X | X | | | | | | | - | - | - | - |
| 544 | Waterfowl | | | | | | | | | | | | X | X | X | | - | - | - | - |
| 546 | Waterfowl | | | | X | X | | | | | | | | | | X | - | - | - | - |
| 547 | Waterfowl | | | | X | X | X | X | X | | | | | | | X | - | - | - | - |
| 550 | Waterfowl | | | | | | | X | X | X | X | X | X | X | X | | - | - | - | - |
| 551 | Waterfowl | | | | X | X | X | X | X | X | X | X | X | X | X | X | - | - | - | - |
| 594 | Bald eagle | | | 1 NEST | X | X | X | X | X | X | X | X | X | X | X | X | APR-AUG | APR-MAY | MAY-JUN | AUG-AUG |
| 808 | Arctic tern | | | MED | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Bald eagle | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Black-legged kittiwake | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Bonaparte's gull | | | HIGH | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Common merganser | | | MED | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Glaucous-winged gull | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Gulls | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Kittlitz's murrelet | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Marbled murrelet | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Mew gull | | | HIGH | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Murrelets | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| 809 | Arctic tern | | | MED | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Bald eagle | | | MED | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Black-legged kittiwake | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Bonaparte's gull | | | MED | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Common merganser | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Glaucous-winged gull | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Gulls | | | MED | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Harlequin duck | | | MED | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Marbled murrelet | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Mew gull | | | HIGH | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Murrelets | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| 815 | Bald eagle | | | HIGH | X | X | X | X | X | X | X | X | X | X | X | X | - | - | - | - |
| | Black-legged kittiwake | | | MED | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Common merganser | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Dabbling ducks | | | MED | X | X | X | | | | | | | | X | X | - | - | - | - |
| | Diving ducks | | | LOW | X | X | X | X | X | X | X | X | X | X | X | X | - | - | - | - |
| | Glaucous-winged gull | | | MED | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Goldeneye | | | HIGH | X | X | X | | | | | | | | X | X | - | - | - | - |
| | Grebes | | | LOW | X | X | X | | | | | | | | X | X | - | - | - | - |
| | Gulls | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Harlequin duck | | | MED | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Loons | | | HIGH | X | X | X | | | | | | | | X | X | - | - | - | - |
| | Marbled murrelet | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Mergansers | | | HIGH | X | X | X | X | X | X | X | X | X | X | X | X | - | - | - | - |
| | Mew gull | | | HIGH | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Murrelets | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Oldsquaw | | | LOW | X | X | X | | | | | | | | X | X | - | - | - | - |
| | Red-breasted merganser | | | LOW | X | X | X | | | | | | | | X | X | - | - | - | - |
| | Scaup | | | HIGH | X | X | X | | | | | | | | X | X | - | - | - | - |
| | Scoters | | | MED | X | X | X | | | | | | | | X | X | - | - | - | - |
| | Surf scoter | | | HIGH | X | X | X | | | | | | | | X | X | - | - | - | - |
| | White-winged scoter | | | MED | X | X | X | | | | | | | | X | X | - | - | - | - |
| 858 | Arctic tern | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Birds | | | LOW | X | X | X | | | | | | | | X | X | - | - | - | - |
| | Black-legged kittiwake | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Bonaparte's gull | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Glaucous-winged gull | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Marbled murrelet | | | MED | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Murrelets | | | MED | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Surf scoter | | | HIGH | X | X | X | X | X | X | X | X | X | X | X | X | - | - | - | - |
| | White-winged scoter | | | MED | X | X | X | | | | | | | | X | X | - | - | - | - |
| 862 | Black-legged kittiwake | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Cormorant | | | LOW | X | X | X | X | X | X | X | X | X | X | X | X | - | - | - | - |
| | Glaucous-winged gull | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Gulls | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Kittlitz's murrelet | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Marbled murrelet | | | MED | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Mew gull | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Murrelets | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Scoters | | | LOW | X | X | X | X | X | X | X | X | X | X | X | X | - | - | - | - |
| | Surf scoter | | | LOW | X | X | X | | | | | | | | X | X | - | - | - | - |
| 863 | Arctic tern | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Black-legged kittiwake | | | MED | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Bonaparte's gull | | | MED | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Glaucous-winged gull | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Marbled murrelet | | | HIGH | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Mergansers | | | MED | X | X | X | | | | | | | | X | X | - | - | - | - |
| | Mew gull | | | LOW | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Murrelets | | | MED | | | | X | X | X | X | X | X | | | | - | - | - | - |
| | Red-necked grebe | | | LOW | X | X | X | | | | | | | | X | X | - | - | - | - |

### FISH:

| RAR# | Species | S/F | T/E | Concen | J | F | M | A | M | J | J | A | S | O | N | D | Spawning | Eggs | Larvae | Juveniles | Adults |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | Pink salmon (humpy) | | | | | | | | | | | X | X | X | | | AUG-OCT | - | - | - | AUG-OCT |
| 7 | Chum salmon (dog) | | | | X | | | | | X | X | X | X | X | X | X | JUN-JAN | - | - | - | JUN-JAN |
| | Pink salmon (humpy) | | | | | | | | | | | X | X | X | | | AUG-OCT | - | - | - | AUG-OCT |
| 11 | Chum salmon (dog) | | | | X | | | | | X | X | X | X | X | X | X | JUN-JAN | - | - | - | JUN-JAN |
| 14 | Sockeye salmon (red) | | | | | | | | X | X | X | X | | | | | MAY-AUG | - | - | - | MAY-AUG |
| 36 | Chum salmon (dog) | | | | X | | | | | X | X | X | X | X | X | X | JUN-JAN | - | - | - | JUN-JAN |
| | Pink salmon (humpy) | | | | | | | | | | | X | X | X | | | AUG-OCT | - | - | - | AUG-OCT |
| | Sockeye salmon (red) | | | | X | X | X | X | X | X | X | X | X | X | X | X | MAY-AUG | - | - | JAN-DEC | MAY-AUG |
| 105 | Pacific herring | | | | | | X | X | X | | | | | | | | MAR-MAY | - | - | - | - |

# Prince William Sound - ESIMAP 13 cont.

## BIOLOGICAL RESOURCES: cont.

### FISH: cont.

| RAR# | Species | S/F | T/E | Concen | J | F | M | A | M | J | J | A | S | O | N | D | Spawning | Eggs | Larvae | Juveniles | Adults |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 625 | Arrowtooth flounder | | | | | | | X | X | X | X | X | | | | | - | - | - | - | APR-AUG |
| | Flathead sole | | | | | | | | X | X | X | X | X | X | X | X | - | - | - | - | MAY-DEC |
| | Pacific cod | | | | | | | | | X | X | X | X | X | X | X | - | - | - | JUN-DEC | JUN-DEC |
| | Rock sole | | | | | | | X | X | X | X | X | | | | | - | - | - | - | APR-AUG |
| | Sablefish (blackcod) | | | | X | X | X | X | X | X | X | X | X | X | X | X | - | - | - | JAN-DEC | JAN-DEC |
| | Sculpin | | | | X | X | X | X | X | X | X | X | X | X | X | X | - | - | - | - | JAN-DEC |
| | Walleye pollock | | | | X | X | X | | | | | | | | | | - | - | - | - | JAN-MAR |
| | Yellowfin sole | | | | X | X | X | X | X | X | X | X | X | X | X | X | MAY-AUG | JUN-AUG | JUN-OCT | JAN-DEC | MAY-AUG |
| 880 | Pacific herring | | | | | | | | | | X | X | | | | | - | - | - | - | - |
| | Pacific sand lance | | | | | | | | | | X | X | | | | | - | - | - | - | - |
| 881 | Pacific herring | | | | | | | | | | | X | | | | | - | - | - | - | - |
| | Pacific sand lance | | | | | | | | | | | X | | | | | - | - | - | - | - |

### INVERTEBRATE:

| RAR# | Species | S/F | T/E | Concen | J | F | M | A | M | J | J | A | S | O | N | D | Spawn/Mate | Eggs | Larvae | Juveniles | Adults |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 626 | Tanner crab | | | SIGNIFICAN | X | X | X | X | X | X | X | X | X | X | X | X | DEC-JUN | APR-SEP | - | JAN-DEC | JAN-DEC |
| 630 | Dungeness crab | | | GENERAL | X | X | X | X | X | X | X | | X | X | X | X | MAY-JUL SE | JUN-JUL | - | SEP-JUL | SEP-JUL |
| | | | | | | | | | | | | | | | | | P-DEC | SEP-SEP | | | |
| 632 | Red king crab | | | MINOR | X | X | X | X | X | X | X | X | X | X | X | X | FEB-JUN | APR-AUG | - | JAN-DEC | JAN-DEC |

### MARINE MAMMAL:

| RAR# | Species | S/F | T/E | Concen | J | F | M | A | M | J | J | A | S | O | N | D | Mating | Calving | Pupping | Molting |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 201 | Sea otter | | | HIGH | X | X | X | X | X | X | X | X | X | X | X | X | - | - | APR-JUN | - |
| 202 | Sea otter | | | HIGH | X | X | X | X | X | X | X | X | X | X | X | X | - | - | APR-JUN | - |
| 203 | Sea otter | | | HIGH | X | X | X | X | X | X | X | X | X | X | X | X | - | - | APR-JUN | - |
| 214 | Sea otter | | | LOW | X | X | X | X | X | X | X | X | X | X | X | X | - | - | APR-JUN | - |
| 215 | Sea otter | | | LOW | X | X | X | X | X | X | X | X | X | X | X | X | - | - | APR-JUN | - |
| 808 | Sea otter | | | LOW | X | X | X | X | X | X | X | X | X | X | X | X | - | - | APR-JUN | - |
| 809 | Sea otter | | | MED | X | X | X | X | X | X | X | X | X | X | X | X | - | - | APR-JUN | - |
| 815 | Sea otter | | | MED | X | X | X | X | X | X | X | X | X | X | X | X | - | - | APR-JUN | - |
| 858 | Sea otter | | | HIGH | X | X | X | X | X | X | X | X | X | X | X | X | - | - | APR-JUN | - |
| 862 | Sea otter | | | LOW | X | X | X | X | X | X | X | X | X | X | X | X | - | - | APR-JUN | - |
| 863 | Sea otter | | | MED | X | X | X | X | X | X | X | X | X | X | X | X | - | - | APR-JUN | - |

Biological information shown on the maps represents known concentration areas or occurrences, but does not necessarily represent the full distribution or range of each species. This is particularly important to recognize when considering potential impacts to protected species.