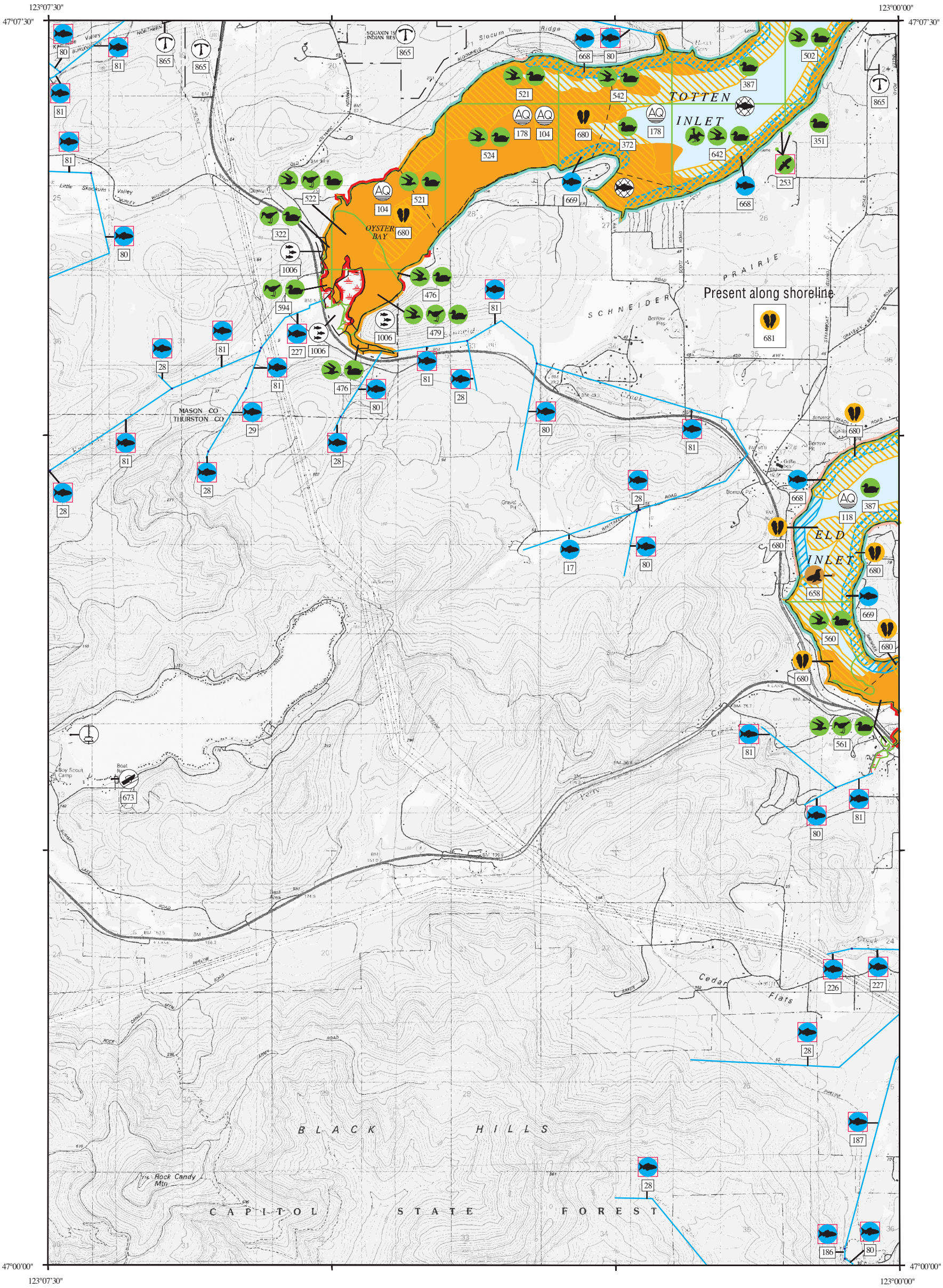
ENVIRONMENTAL SENSITIVITY INDEX MAP



SHORELINE HABITATS (ESI)

- 1A EXPOSED ROCKY SHORES
  1B EXPOSED, SOLID MAN–MADE STRUCTURES
- 2A EXPOSED WAVE–CUT PLATFORMS IN BEDROCK, MUD, OR CLAY
- 3A FINE–TO MEDIUM–GRAINED SAND BEACHES
  3B SCARPS AND STEEP SLOPES IN SAND
- 4 COARSE–GRAINED SAND BEACHES
- 5 MIXED SAND AND GRAVEL BEACHES
- 6A GRAVEL BEACHES
  6D BOULDER RUBBLE
- 6B RIPRAP
- 7 EXPOSED TIDAL FLATS
- 8A SHELTERED ROCKY SHORES AND SHELTERED SCARPS IN BEDROCK, MUD, OR CLAY
- 8B SHELTERED, SOLID MAN–MADE STRUCTURES
- 8C SHELTERED RIPRAP
- 9A SHELTERED TIDAL FLATS
  9B VEGETATED LOW BANKS
- 10A SALT– AND BRACKISH–WATER MARSHES
- 10C SWAMPS

N W E S

1 .5 0 1 KILOMETER

1 .5 0 1 MILE

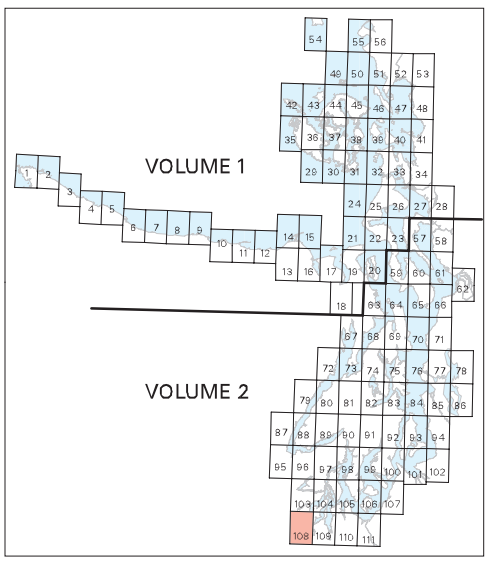
SCALE 1:45000

Not For Navigation

Published: May 2006

Published for:
Navy Region Northwest and
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Response and Restoration
Hazardous Materials Response Division

Prepared by:
Concurrent Technologies Corp., Sound GIS, and
Research Planning, Inc.



Summit Lake ESI-108

Puget Sound and the Strait of Juan de Fuca: ESIMAP 108

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Laying	Hatching	Fledging
253	Bald eagle	T	T		X	X	X	X	X	X							JAN-JUL	FEB-MAR	MAR-APR	JAN-JUL
322	Goldeneye				X	X	X	X							X	X	-	-	-	-
	Shorebirds				X	X	X	X	X				X	X	X	X	-	-	-	-
	Waterfowl				X	X	X									X	-	-	-	-
351	Bufflehead				X	X	X	X							X	X	-	-	-	-
	Scoters				X	X	X	X	X			X	X	X	X	X	-	-	-	-
372	Bufflehead				X	X	X	X							X	X	-	-	-	-
	Scaup				X	X	X	X							X	X	-	-	-	-
	Scoters				X	X	X	X	X			X	X	X	X	X	-	-	-	-
387	Bufflehead				X	X	X	X							X	X	-	-	-	-
	Goldeneye				X	X	X	X							X	X	-	-	-	-
	Scoters				X	X	X	X	X			X	X	X	X	X	-	-	-	-
476	Bufflehead				X	X	X	X							X	X	-	-	-	-
	Gulls				X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	MAY-JUL	JUN-AUG	JUN-SEP
479	Bufflehead				X	X	X	X							X	X	-	-	-	-
	Gulls				X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	MAY-JUL	JUN-AUG	JUN-SEP
	Shorebirds				X	X	X	X	X				X	X	X	X	-	-	-	-
	Waterfowl				X	X	X									X	-	-	-	-
502	Bufflehead				X	X	X	X							X	X	-	-	-	-
	Gulls				X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	MAY-JUL	JUN-AUG	JUN-SEP
	Scoters				X	X	X	X	X			X	X	X	X	X	-	-	-	-
521	Bufflehead				X	X	X	X							X	X	-	-	-	-
	Gulls				X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	MAY-JUL	JUN-AUG	JUN-SEP
	Scaup				X	X	X	X							X	X	-	-	-	-
522	Bufflehead				X	X	X	X							X	X	-	-	-	-
	Gulls				X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	MAY-JUL	JUN-AUG	JUN-SEP
	Scaup				X	X	X	X							X	X	-	-	-	-
	Shorebirds				X	X	X	X	X				X	X	X	X	-	-	-	-
	Waterfowl				X	X	X									X	-	-	-	-
524	Bufflehead				X	X	X	X							X	X	-	-	-	-
	Gulls				X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	MAY-JUL	JUN-AUG	JUN-SEP
	Scaup				X	X	X	X							X	X	-	-	-	-
	Scoters				X	X	X	X	X			X	X	X	X	X	-	-	-	-
542	Bufflehead				X	X	X	X							X	X	-	-	-	-
	Goldeneye				X	X	X	X							X	X	-	-	-	-
	Gulls				X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	MAY-JUL	JUN-AUG	JUN-SEP
	Scoters				X	X	X	X	X			X	X	X	X	X	-	-	-	-
560	Bufflehead				X	X	X	X							X	X	-	-	-	-
	Goldeneye				X	X	X	X							X	X	-	-	-	-
	Gulls				X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	MAY-JUL	JUN-AUG	JUN-SEP
	Scaup				X	X	X	X							X	X	-	-	-	-
	Scoters				X	X	X	X	X			X	X	X	X	X	-	-	-	-
561	Bufflehead				X	X	X	X							X	X	-	-	-	-
	Goldeneye				X	X	X	X							X	X	-	-	-	-
	Gulls				X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	MAY-JUL	JUN-AUG	JUN-SEP
	Scaup				X	X	X	X							X	X	-	-	-	-
	Scoters				X	X	X	X	X			X	X	X	X	X	-	-	-	-
	Shorebirds				X	X	X	X	X				X	X	X	X	-	-	-	-
594	Shorebirds				X	X	X	X	X				X	X	X	X	-	-	-	-
	Waterfowl				X	X	X									X	-	-	-	-
642	Bufflehead				X	X	X	X							X	X	-	-	-	-
	Cormorant				X	X	X	X	X	X	X	X	X	X	X	X	APR-OCT	APR-AUG	MAY-SEP	JUN-OCT
	Gulls				X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	MAY-JUL	JUN-AUG	JUN-SEP
	Scaup				X	X	X	X							X	X	-	-	-	-
	Scoters				X	X	X	X	X			X	X	X	X	X	-	-	-	-

FISH:

RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
17	Steelhead (winter)				X	X	X	X	X	X					X	X	FEB-JUN	-	-	-	NOV-JUN
28	Coho salmon		C		X					X	X	X	X	X	X	X	SEP-JAN	-	-	-	JUL-JAN
29	Coho salmon		C		X					X	X	X	X	X	X	X	SEP-JAN	-	-	-	JUL-JAN
	Steelhead (winter)				X	X	X	X	X	X					X	X	FEB-JUN	-	-	-	NOV-JUN
80	Chum salmon (fall)				X								X	X	X	X	SEP-JAN	-	-	-	SEP-JAN
	Coho salmon		C		X					X	X	X	X	X	X	X	SEP-JAN	-	-	-	JUL-JAN
81	Chum salmon (fall)				X								X	X	X	X	SEP-JAN	-	-	-	SEP-JAN
	Coho salmon		C		X					X	X	X	X	X	X	X	SEP-JAN	-	-	-	JUL-JAN
	Steelhead (winter)				X	X	X	X	X	X					X	X	FEB-JUN	-	-	-	NOV-JUN
186	Chinook salmon (fall)	C	T							X	X	X	X	X	X	X	SEP-DEC	-	-	-	JUL-DEC
	Chum salmon (fall)				X								X	X	X	X	SEP-JAN	-	-	-	SEP-JAN
	Coho salmon		C		X					X	X	X	X	X	X	X	SEP-JAN	-	-	-	JUL-JAN
187	Chinook salmon (fall)	C	T							X	X	X	X	X	X	X	SEP-DEC	-	-	-	JUL-DEC
	Chum salmon (fall)				X								X	X	X	X	SEP-JAN	-	-	-	SEP-JAN
	Coho salmon		C		X					X	X	X	X	X	X	X	SEP-JAN	-	-	-	JUL-JAN
	Steelhead (winter)				X	X	X	X	X	X					X	X	FEB-JUN	-	-	-	NOV-JUN
226	Chinook salmon (fall)	C	T							X	X	X	X	X	X	X	SEP-DEC	-	-	-	JUL-DEC
	Chinook salmon (spring)	C	T				X	X	X	X	X	X	X	X			JUL-OCT	-	-	-	MAR-OCT
	Chinook salmon (summer)	C	T							X	X	X	X	X	X		AUG-NOV	-	-	-	JUN-NOV
	Chum salmon (fall)				X								X	X	X	X	SEP-JAN	-	-	-	SEP-JAN
	Coho salmon		C		X					X	X	X	X	X	X	X	SEP-JAN	-	-	-	JUL-JAN
227	Chinook salmon (fall)	C	T							X	X	X	X	X	X	X	SEP-DEC	-	-	-	JUL-DEC
	Chinook salmon (spring)	C	T				X	X	X	X	X	X	X	X			JUL-OCT	-	-	-	MAR-OCT
	Chinook salmon (summer)	C	T							X	X	X	X	X	X		AUG-NOV	-	-	-	JUN-NOV
	Chum salmon (fall)				X								X	X	X	X	SEP-JAN	-	-	-	SEP-JAN
	Coho salmon		C		X					X	X	X	X	X	X	X	SEP-JAN	-	-	-	JUL-JAN
	Steelhead (winter)				X	X	X	X	X	X					X	X	FEB-JUN	-	-	-	NOV-JUN
668	Rock sole				X	X	X	X							X	X	NOV-APR	-	-	-	-
	Surf smelt				X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	-	-	-	-
669	Surf smelt				X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	-	-	-	-

INVERTEBRATE:

RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
680	Hardshell clams				x	x	x	x	x	x	x	x	x	x	x	x	-	-	-	-	-
681	Pacific oyster				x	x	x	x	x	x	x	x	x	x	x	x	-	-	-	-	-

MARINE MAMMAL:

RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Pupping	Molting
658	Harbor seal				X	X	X	X	X	X	X	X	X	X	X	X	-	-	JUL-SEP	SEP-NOV

==========

HUMAN USE RESOURCES:

AQUACULTURE:

HUN#	Name	Contact	Phone
104	CULTURED MUSSELS		
118	ELD INLET		
178	TOTTEN INLET		

BOAT RAMP:

HUN#	Name	Contact	Phone
673	SUMMIT LAKE (WDFW)	WASHINGTON DEPARTMENT OF FISH AND WILDLIFE	360/902-2200

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.

Puget Sound and the Strait of Juan de Fuca: ESIMAP 108 (cont.)

HUMAN USE RESOURCES: (cont.)

INDIAN RESERVATION:

HUN#	Name	Contact	Phone
865	SQUAXIN ISLAND TRIBE	SQUAXIN ISLAND TRIBE	360/426-9781

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
1006	KENNEDY CREEK NAP	WASHINGTON DEPARTMENT OF NATURAL RESOURCES	