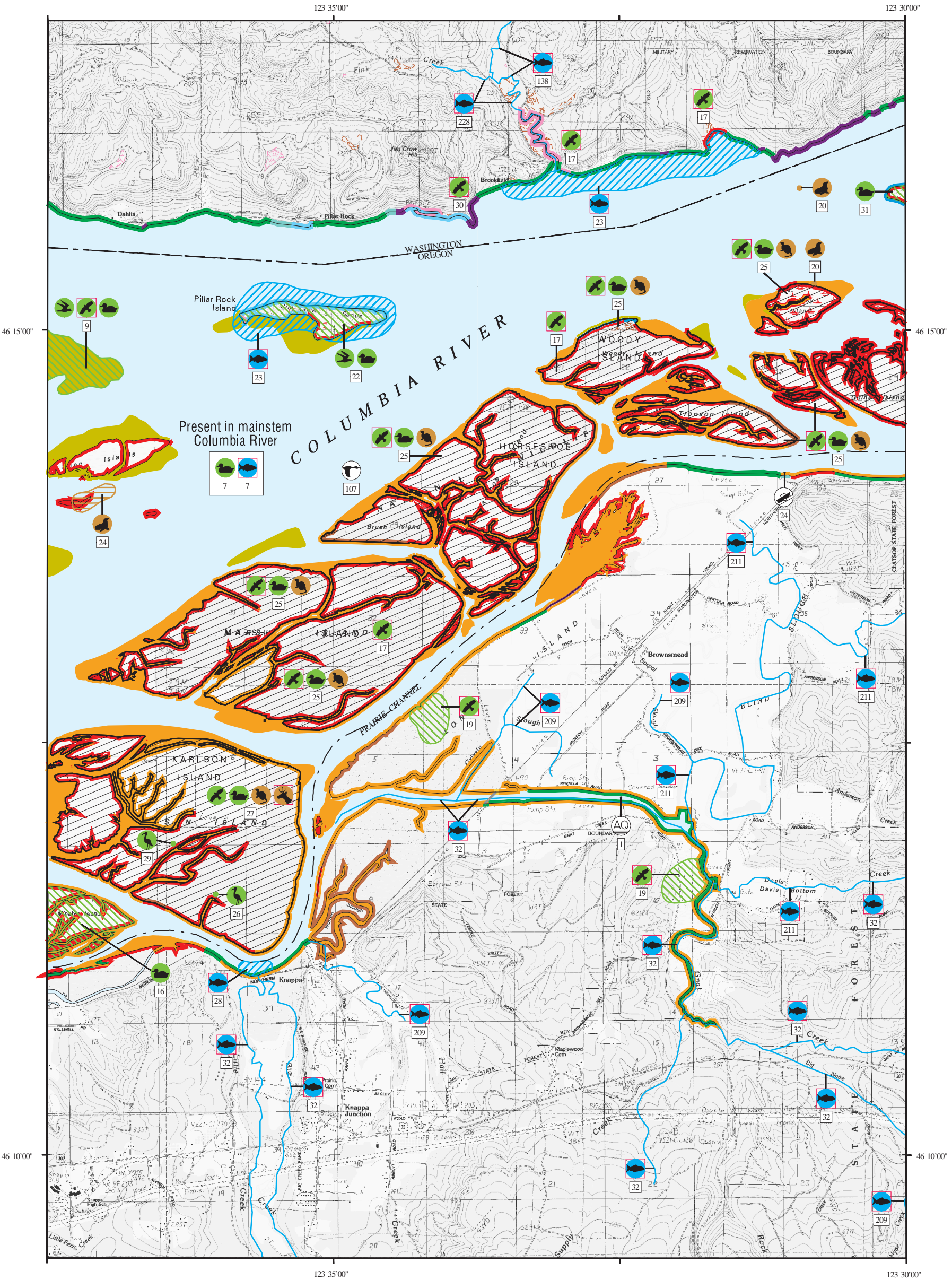
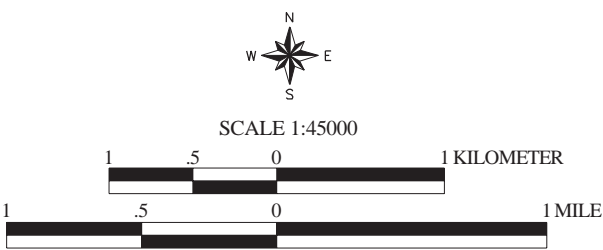


# ENVIRONMENTAL SENSITIVITY INDEX MAP

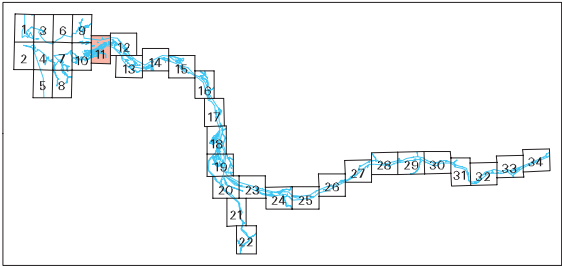


- SHORELINE HABITATS (ESI)**
- 1A EXPOSED ROCKY SHORES
  - 1B EXPOSED, SOLID MAN-MADE STRUCTURES
  - 2A EXPOSED WAVE-CUT PLATFORMS IN BEDROCK
  - 3A FINE- TO MEDIUM-GRAINED SAND BEACHES
  - 3B SCARPS AND STEEP SLOPES IN SAND
  - 4 COARSE-GRAINED SAND BEACHES
  - 5 MIXED SAND AND GRAVEL BEACHES
  - 6A GRAVEL BEACHES
  - 6B RIPRAP
  - 7 EXPOSED TIDAL FLATS
  - 8A SHELTERED ROCKY SHORES
  - 8B SHELTERED, SOLID MAN-MADE STRUCTURES
  - 8C SHELTERED RIPRAP
  - 9A SHELTERED TIDAL FLATS
  - 9B SHELTERED, VEGETATED LOW BANKS
  - 10A SALT- AND BRACKISH- WATER MARSHES
  - 10B FRESHWATER MARSHES
  - 10C SWAMPS
  - 10D SCRUB-SHRUB WETLANDS



Not For Navigation  
Published: June 2004

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



Columbia River: ESIMAP 11

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S	F	ST	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
		-	-	-		-	-	-	-	-	-	-	-	-	-	-	-			
7	Canada goose					X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	-	-
	Common goldeneye					X	X									X	X	-	-	-
	Scaup					X	X	X	X	X				X	X	X	X	-	-	-
	Dabbling ducks					X	X	X	X					X	X	X	X	-	-	-
9	Canada goose					X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	-	-
	Glaucous-winged gull				75 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-SEP	-	-
	Western gull				75 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-SEP	-	-
	Ring-billed gull				75 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Waterfowl				HIGH	X	X									X	X	-	-	-
	Bald eagle	T	T		2 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	JAN-AUG	-	-
16	Waterfowl				HIGH	X	X									X	X	-	-	-
17	Bald eagle	T	T		1 PAIR	X	X	X	X	X	X	X	X	X	X	X	X	JAN-AUG	-	-
19	Bald eagle	T	T		3 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	JAN-AUG	-	-
22	Waterfowl				HIGH	X	X									X	X	-	-	-
	Gulls					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Canada goose				50-100	X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	-	-
25	American wigeon				10000	X	X	X	X	X				X	X	X	X	-	-	-
	Bald eagle	T	T			X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Mallard				10000	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Northern pintail				10000	X	X									X	X	-	-	-
	Green-winged teal				10000	X	X	X	X	X				X	X	X	X	-	-	-
	Tundra swan				1000	X	X	X	X					X	X	X	X	-	-	-
	Canada goose					X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	-	-
26	Great blue heron				300 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
27	Peregrine falcon					X	X	X							X	X	X	FEB-MAR	-	-
	American wigeon					X	X	X	X	X				X	X	X	X	-	-	-
	Waterfowl					X	X									X	X	-	-	-
	Ducks				10,000-20,000	X	X									X	X	-	-	-
	Tundra swan					X	X	X	X	X				X	X	X	X	-	-	-
	Mallard					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Northern pintail					X	X									X	X	-	-	-
	Green-winged teal					X	X	X	X	X				X	X	X	X	-	-	-
	Canada goose				20000	X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	-	-
29	Great blue heron				40-50 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
30	Bald eagle	T	T		2 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	JAN-AUG	-	-
31	Canada goose				10-25 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	-	-

FISH:

RAR#	Species	S	F	ST	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
		-	-	-		-	-	-	-	-	-	-	-	-	-	-	-					
7	Chinook salmon (summer)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	SEP-APR	-	MAR-SEP	JUN-NOV
	Sockeye salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	SEP-OCT	-	-	JAN-DEC	AUG-FEB
	White sturgeon					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Coastal Cutthroat trout	C		OR		X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAY	JAN-JUN	-	JAN-DEC	JAN-DEC
	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Chum salmon	*	*			X	X	X	X	X				X	X	X	X	NOV-DEC	DEC-MAR	-	FEB-MAY	OCT-DEC
	Chinook salmon (fall)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-DEC	OCT-FEB	-	FEB-NOV	AUG-DEC
	Chinook salmon (spring)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-DEC	-	JAN-DEC	JAN-SEP
	Steelhead (summer)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUN	JAN-JUN	-	JAN-DEC	MAR-OCT
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
	Bull trout	C	T			X	X	X	X	X	X	X	X	X	X	X	X	SEP-OCT	SEP-JAN	-	JAN-DEC	JAN-DEC
23	Chinook salmon (fall)	*	*		HIGH	X	X	X	X	X	X	X	X	X	X	X	X	OCT-DEC	OCT-FEB	-	FEB-NOV	AUG-DEC
	Steelhead (summer)	*	*		HIGH	X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUN	JAN-JUN	-	JAN-DEC	MAR-OCT
	Chinook salmon (spring)	*	*		HIGH	X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-DEC	-	JAN-DEC	JAN-SEP
28	Chinook salmon (fall)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-DEC	OCT-FEB	-	FEB-NOV	AUG-DEC
	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
32	Chum salmon	*	*			X	X	X	X					X	X	X	X	NOV-DEC	DEC-MAR	-	FEB-MAY	OCT-DEC
	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Chinook salmon (spring)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-DEC	-	JAN-DEC	JAN-SEP
138	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
209	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
211	Chum salmon	*	*			X	X	X	X					X	X	X	X	NOV-DEC	DEC-MAR	-	FEB-MAY	OCT-DEC
	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
228	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
	Chum salmon	*	*			X	X	X	X	X				X	X	X	X	NOV-DEC	DEC-MAR	-	FEB-MAY	OCT-DEC
	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN

MARINE MAMMAL:

RAR#	Species	S	F	ST	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Pupping	Molting
		-	-	-		-	-	-	-	-	-	-	-	-	-	-	-				
20	Harbor seal				100-500	X	X	X	X	X	X	X	X	X	X	X	X	-	-	APR-JUL	-
24	Harbor seal				50-100	X	X	X	X	X	X	X	X	X	X	X	X	-	-	APR-JUL	-

TERRESTRIAL MAMMAL:

RAR#	Species	S	F	ST	Conc.	J	F	M	A	M	J	J	A	S	O	N	D				
		-	-	-		-	-	-	-	-	-	-	-	-	-	-	-				
25	Mink					X	X	X	X	X	X	X	X	X	X	X	X				
	Northern river otter					X	X	X	X	X	X	X	X	X	X	X	X				
27	Northern river otter					X	X	X	X	X	X	X	X	X	X	X	X				
	Columbian white-tailed deer	E	E	WA		X	X	X	X	X	X	X	X	X	X	X	X				
	Mink					X	X	X	X	X	X	X	X	X	X	X	X				

HUMAN USE RESOURCES:

AQUACULTURE:

HUN#	Name	Contact	Phone
1	BLIND SLOUGH SALMON NET PENS	JOHN NORTH, ODFW	503/657-2000

BOAT RAMP:

HUN#	Name	Contact	Phone
24	ALDRICH BOAT RAMP		503/325-9503

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
107	LEWIS AND CLARK NWR	USFWS	360/484-3482

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.