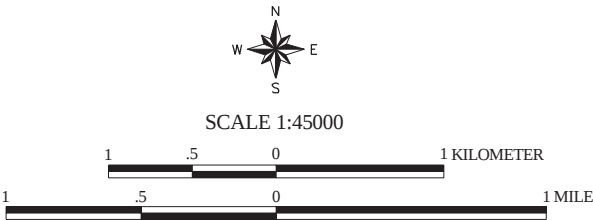


ENVIRONMENTAL SENSITIVITY INDEX MAP

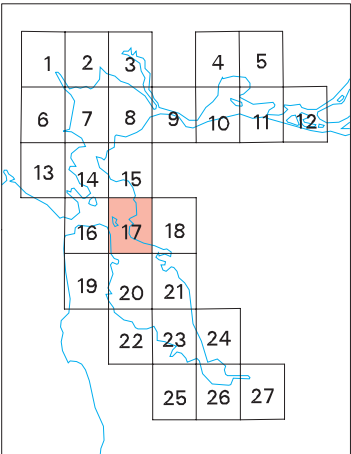


- SHORELINE HABITATS**
- 1A EXPOSED ROCKY SHORES
 - 1B EXPOSED, SOLID MAN - MADE STRUCTURES
 - 2A EXPOSED WAVE - CUT PLATFORMS IN BEDROCK
 - 3A FINE - TO MEDIUM - GRAINED SAND BEACHES
 - 3B SCARPS AND STEEP SLOPES IN SAND
 - 4 COARSE - GRAINED SAND BEACHES
 - 5 MIXED SAND AND GRAVEL BEACHES
 - 6A GRAVEL 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 VEGETATED LOW RIVERINE BANKS
 - 10A SALT - AND BRACKISH - WATER MARSHES
 - TIDAL MARSHES
 - MUTED TIDAL MARSHES
 - MANAGED MARSHES
 - DIKED MARSHES
 - SALT PONDS



Not For Navigation
 Published: December 1998

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



SAN FRANCISCO BAY – ESIMAP 17

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
22	California clapper rail	S/F	E/E	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-	-
56	Shorebirds			LOW	X	X	X	X		X	X	X	X	X	X	X	-	-	-	-
	Wading birds			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
66	Western gull			4	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	APR-JUN	MAY-JUL	JUL-AUG
69	Western gull			1	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	APR-JUN	MAY-JUL	JUL-AUG
80	Western gull			3	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	APR-JUN	MAY-JUL	JUL-AUG
91	Western gull			5	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	APR-JUN	MAY-JUL	JUL-AUG
143	Western gull			48	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	APR-JUN	MAY-JUL	JUL-AUG
154	Canvasback			MEDIUM	X	X	X							X	X	X	-	-	-	-
	Diving ducks			HIGH	X	X	X						X	X	X		-	-	-	-
	Western grebe			HIGH	X	X	X	X					X	X	X		-	-	-	-
155	Common murre			LOW							X	X					-	-	-	-
164	Peregrine falcon	S/F	E/E	2	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-	-
	Western gull			24	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	APR-JUN	MAY-JUL	JUL-AUG
181	Western gull			19	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	APR-JUN	MAY-JUL	JUL-AUG
182	Western gull			20	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	APR-JUN	MAY-JUL	JUL-AUG
183	Black oystercatcher				X	X	X	X	X	X	X	X	X	X	X	X	MAY-OCT	MAY-JUL	JUN-AUG	JUL-OCT
	Brandt's cormorant			4		X	X	X	X	X	X						APR-SEP	APR-JUL	MAY-AUG	JUN-SEP
	Pelagic cormorant			2		X	X	X	X	X	X	X					MAY-SEP	MAY-JUL	JUN-AUG	JUL-SEP
	Western gull			31	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	APR-JUN	MAY-JUL	JUL-AUG
184	Double-crested cormorant			465	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	MAR-MAY	MAR-JUN	MAY-AUG
	Peregrine falcon	S/F	E/E	2	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-	-
185	California gull			400	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	APR-JUN	MAY-JUL	JUL-AUG
	California least tern	S/F	E/E	240		X	X	X	X	X							MAY-AUG	MAY-JUN	JUN-JUL	JUN-AUG
	Caspian tern			250		X	X	X	X	X							APR-AUG	APR-JUN	MAY-JUL	JUL-AUG
	Western gull			251	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	APR-JUN	MAY-JUL	JUL-AUG
186	Alameda song sparrow			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUN	-	-	-
188	Alameda song sparrow			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUN	-	-	-
	Canada goose			HIGH	X	X	X						X	X	X	X	-	-	-	-
	Shorebirds			HIGH	X	X	X	X		X	X	X	X	X	X	X	-	-	-	-
189	American white pelican			HIGH		X	X	X	X	X							-	-	-	-
	California brown pelican	S/F	E/E	HIGH		X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Diving ducks			HIGH	X	X	X	X					X	X	X	X	-	-	-	-
	Gulls			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Ruddy duck			HIGH	X	X	X	X					X	X	X	X	-	-	-	-
	Terns			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Wading birds			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
190	Shorebirds			MEDIUM	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Wading birds			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
192	California brown pelican	S/F	E/E	HIGH					X	X	X	X	X	X	X	X	-	-	-	-
296	Black-crowned night-heron				X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-	-
300	California black rail	S	T	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	MAR-MAY	-	-	-

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
76	California halibut			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	OCT-MAR	JAN-DEC	JAN-DEC
137	Pacific herring			HIGH	X	X	X	X									NOV-MAR	NOV-APR	-	-	NOV-MAR
152	American shad			HIGH					X	X	X	X	X	X	X	X	-	-	-	AUG-DEC	MAY-JUL
	Bat ray			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Brown rockfish			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Chinook salmon (fall)			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JUL-NOV
	Chinook salmon (late fall)			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	OCT-MAR
	Chinook salmon (spring)			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	FEB-AUG
	Chinook salmon (winter)	S/F	E/E	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	NOV-MAY
	Leopard shark			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Striped bass			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JUN-AUG
	White croaker			MEDIUM	X	X	X	X	X	X	X	X	X	X	X	X	SEP-MAR	SEP-MAR	SEP-MAR	JAN-DEC	JAN-DEC
153	American shad			HIGH					X	X	X	X	X	X	X	X	-	-	-	AUG-DEC	MAY-JUL
	Bat ray			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	JUN-AUG	-	-	JAN-DEC	JAN-DEC
	California halibut			MEDIUM	X	X	X	X	X	X	X	X	X	X	X	X	-	-	OCT-MAR	JAN-DEC	JAN-DEC
	Chinook salmon (fall)			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	Chinook salmon (late fall)			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	Chinook salmon (spring)			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	Chinook salmon (winter)	S/F	E/E	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	English sole			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	DEC-APR	JAN-DEC	-
	Leopard shark			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-	JAN-DEC	JAN-DEC
	Striped bass			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JUN-AUG
180	Bat ray			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Chinook salmon (fall)			MEDIUM	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	Chinook salmon (late fall)			MEDIUM	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	Chinook salmon (spring)			MEDIUM	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	Chinook salmon (winter)	S/F	E/E	MEDIUM	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	Leopard shark			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	White croaker			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	SEP-MAR	JAN-DEC	-
191	Bat ray			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	JUN-AUG	-	-	JAN-DEC	JAN-DEC
	Chinook salmon (fall)			MEDIUM	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	Chinook salmon (late fall)			MEDIUM	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	Chinook salmon (spring)			MEDIUM	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	Chinook salmon (winter)	S/F	E/E	MEDIUM	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	English sole			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	DEC-APR	JAN-DEC	-
	Leopard shark			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-	JAN-DEC	JAN-DEC
	Striped bass			HIGH					X	X	X						-	-	-	-	JUN-AUG
192	Pacific herring			HIGH	X	X	X	X						X	X	X	NOV-MAR	NOV-APR	-	-	NOV-MAR

HABITAT/PLANT:

RAR#	Species	S/F	T/E	Concen	J	F	M	A	M	J	J	A	S	O	N	D
161	Eelgrass				X	X	X	X	X	X	X	X	X	X	X	X
187	Eelgrass				X	X	X	X	X	X	X	X	X	X	X	X
291	Eelgrass				X	X	X	X	X	X	X	X	X	X	X	X
320	Santa Cruz tarplant	S	E	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X

INVERTEBRATE:

RAR#	Species	S/F	T/E	Concen	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
77	Pacific rock crab			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Red rock crab			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
152	Blacktail bay shrimp			MEDIUM	X	X	X	X	X	X	X	X	X	X	X	X	JAN-MAR	JAN-SEP	MAR-SEP	-	JAN-NOV
	California bay shrimp			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	JAN-MAR	JAN-SEP	MAR-SEP	-	JAN-NOV
	Dungeness crab			HIGH	X	X		X	X					X	X		-	-	-	APR-JUN	-
																				NOV-FEB	
153	Blacktail bay shrimp			MEDIUM	X	X	X	X	X	X	X	X	X	X	X	X	-	-	MAR-SEP	MAR-OCT	JAN-NOV
191	Blacktail bay shrimp			MEDIUM	X	X	X	X	X	X	X	X	X	X	X	X	-	-	MAR-SEP	MAR-OCT	JAN-NOV

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
183	Harbor seal			320	X	X	X	X	X	X	X	X	X	X	X	X	-	-	MAR-MAY	JUN-AUG
192	California sea lion			HIGH		X	X	X					X	X	X		-	-	-	-
193	Harbor seal			75	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JUN-AUG

TERRESTRIAL MAMMAL:

RAR#	Species
------	---------

SAN FRANCISCO BAY – ESIMAP 17 (continued)

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name
33	ENCINAL BOAT RAMP
40	PUBLIC BOAT RAMP

MARINA:

HUN#	Name
71	5TH AVENUE MARINA
82	BALLENA ISLE MARINA
83	BARNHILL MARINA
85	BERKLEY MARINA
86	BERKLEY MARINE CENTER
107	EMBARCADERO COVE MARINA
108	EMERY COVE MARINA
109	EMERYVILLE MARINA
110	ENCINAL YACHT CLUB
111	ESTUARY PARK RAMP
113	FORTMANN MARINA
117	GRAND ST MUNICIPAL RAMP
120	JACK LONDON MARINA
123	LAKE MERRITT BOAT HOUSE
136	MARINA VILLAGE YACHT HARBOR
145	NORCAL BOAT YARD
184	SEABIRD SAILING
185	SEABREEZE YACHT CENTER
195	TREASURE ISLAND MARINA

STATE/REGIONAL PARK:

HUN#	Name	Owner	Contact	Phone
203	ALAMEDA ESTUARY STATE FISHING ACCESS			
210	BERKELEY STATE FISHING PIER			
220	FRANKLIN D. ROOSEVELT STATE FISHING PIER			
247	ROBERT W. CROWN MEMORIAL STATE BEACH	EBRP	DISPATCH	510-881-1833