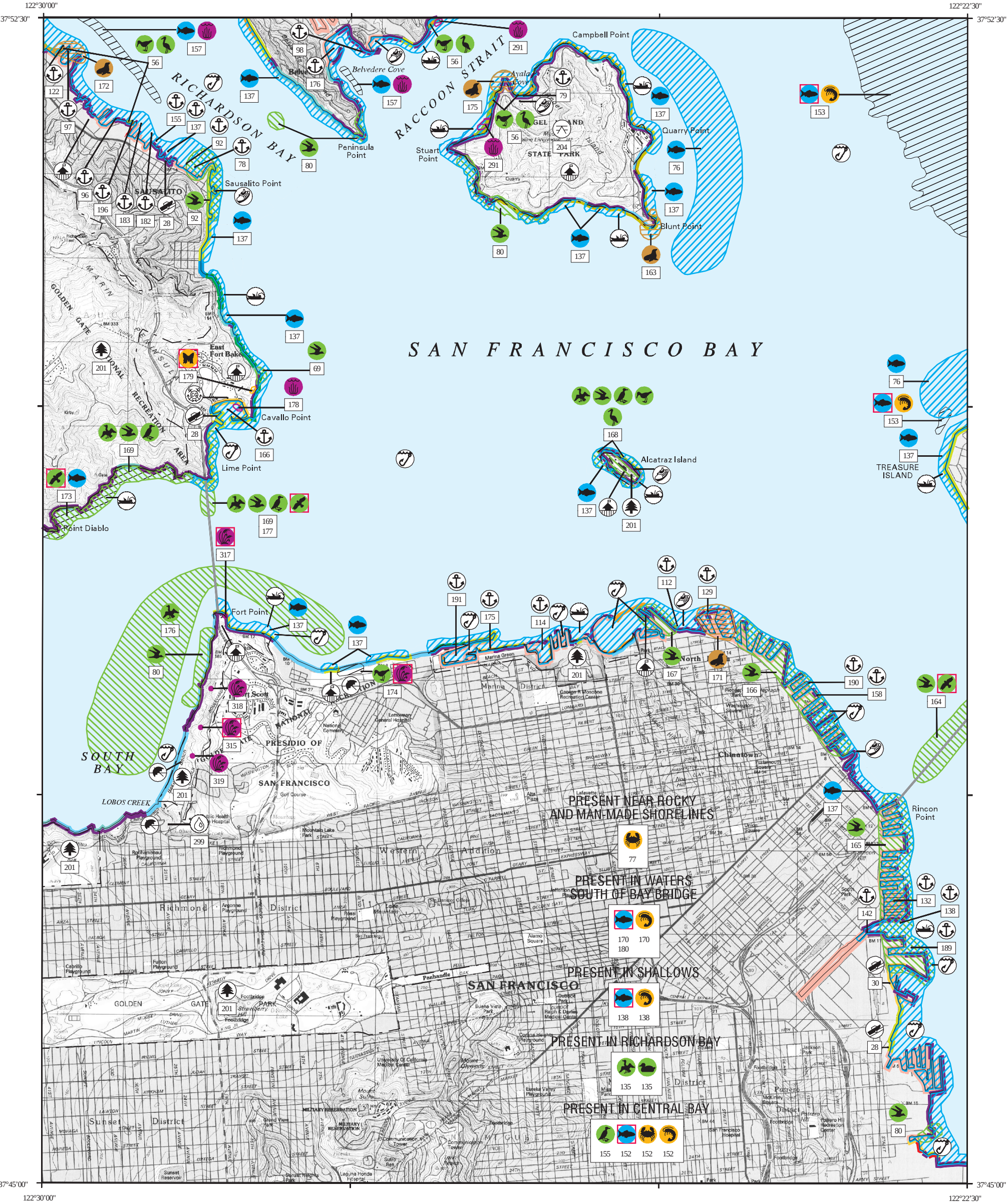
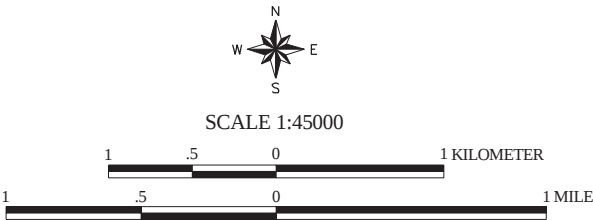


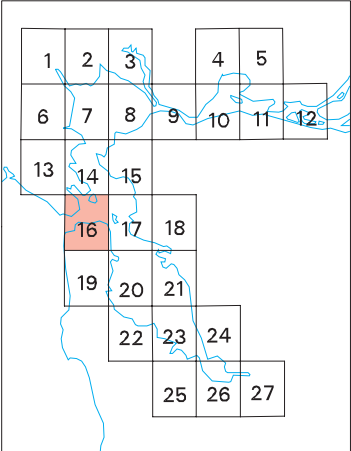
ENVIRONMENTAL SENSITIVITY INDEX MAP



- 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



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SAN FRANCISCO BAY – ESIMAP 16

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
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	-	-	-	-
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
92	Western gull			2	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	APR- JUN	MAY- JUL	JUL- AUG
135	Canvasback			MEDIUM	X	X	X	X						X	X	X	-	-	-	-
	Diving ducks			HIGH	X	X	X	X						X	X	X	-	-	-	-
	Western grebe			VERY HIGH	X	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
165	Western gull			116	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	APR- JUN	MAY- JUL	JUL- AUG
166	Western gull			31	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	APR- JUN	MAY- JUL	JUL- AUG
167	Western gull			33	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	APR- JUN	MAY- JUL	JUL- AUG
168	Black oystercatcher			1	X	X	X	X	X	X	X	X	X	X	X	X	MAY-OCT	MAY- JUL	JUN- AUG	JUL- OCT
	Black-crowned night-heron			300	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-	-
	Brandt's cormorant			220													APR-SEP	APR- JUL	MAY- AUG	JUN- SEP
	Great egret			1	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-	-
	Pelagic cormorant			15		X	X	X	X	X	X	X					MAY-SEP	MAY- JUL	JUN- AUG	JUL- SEP
	Pigeon guillemot			30													APR-SEP	APR- JUL	MAY- AUG	JUL- SEP
	Snowy egret			15	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-	-
	Western gull			520	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	APR- JUN	MAY- JUL	JUL- AUG
169	Pelagic cormorant			7		X	X	X	X	X	X	X					MAY-SEP	MAY- JUN	JUN- AUG	JUL- SEP
	Pigeon guillemot																APR-SEP	APR- JUL	MAY- AUG	JUL- SEP
	Western gull			17	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	APR- JUN	MAY- JUL	JUL- AUG
173	Peregrine falcon	S/F	E/E		X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-	-
174	Shorebirds			LOW	X	X	X	X	X		X	X	X	X	X	X	-	-	-	-
176	Western grebe			HIGH	X	X	X	X						X	X	X	-	-	-	-
177	Peregrine falcon	S/F	E/E		X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-	-

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							X	X	NOV-MAR	NOV-APR	-	-	NOV-MAR
138	American shad			HIGH						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	-
	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
152	American shad			HIGH						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	-	-	-	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
157	Pacific herring			HIGH	X	X	X	X							X	X	NOV-MAR	NOV-APR	-	-	NOV-MAR
170	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	-
	Leopard shark			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-	JAN-DEC	JAN-DEC
173	Pacific herring			HIGH	X	X	X	X							X	X	NOV-MAR	NOV-APR	-	-	NOV-MAR
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	-

HABITAT/PLANT:																
RAR#	Species	S/F	T/E	Concen	J	F	M	A	M	J	J	A	S	O	N	D
157	Eelgrass				X	X	X	X	X	X	X	X	X	X	X	X
174	California seablite	F	E	POTENTIAL	X	X	X	X	X	X	X	X	X	X	X	X
	Point Reyes bird's-beak			POTENTIAL	X	X	X	X	X	X	X	X	X	X	X	X
	Rare plants			POTENTIAL	X	X	X	X	X	X	X	X	X	X	X	X
178	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
315	Marin western flax	S/F	T/T	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X
317	Marsh sandwort	S/F	E/E	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X
318	San Francisco gumplant			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X
319	San Francisco campion			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
138	Blacktail bay shrimp			MEDIUM	X	X	X	X	X	X	X	X	X	X	X	X	-	-	MAR-SEP	MAR-OCT	JAN-NOV
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	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
170	Blacktail bay shrimp			MEDIUM	X	X	X	X	X	X	X	X	X	X	X	X	-	-	MAR-SEP	MAR-OCT	JAN-NOV
179	Mission blue butterfly	F	E	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-

SAN FRANCISCO BAY – ESIMAP 16 (continued)

HUMAN USE RESOURCES (continued):

MARINA:

HUN#	Name	Owner	Contact	Phone
78	ANDERSONS BOAT YARD			
79	ANGEL ISLAND STATE PARK			
92	CARUSOS SPORTFISHING CENTER			
96	CLIPPER YACHT HARBOR #1			
97	CLIPPER YACHT HARBOR (# 2, 3, 4)			
98	CORINTHIAN YACHT CLUB			
112	FISHERMANS WHARF			
114	GAS HOUSE COVE MARINA			
122	KAPPAS YACHT HARBOR			
129	MARINA			
132	MARINA			
137	MARINSHIP YACHT HARBOR			
138	MARIPOSA HUNTERS POINT YC			
142	MISSION CREEK HARBOR ASSOC			
155	PELICAN YACHT HARBOR			
158	PIER 39 MARNIA			
166	PRESIDIO YACHT CLUB			
175	SAN FRANCISCO MARINA			
176	SAN FRANCISCO YACHT CLUB			
182	SAUSALITO YACHT HARBOR			
183	SCHOONMAKER MARINA			
189	SOUTH BEACH HARBOR			
190	SOUTH BEACH HARBOR - PIER 40			
191	ST. FRANCIS YACHT CLUB			
196	TURNEY STREET LAUNCHING RAMP			

NATIONAL PARK:

HUN#	Name	Owner	Contact	Phone
201	GOLDEN GATE NATIONAL RECREATION AREA	NPS	DISPATCH	415-561-5505

STATE/REGIONAL PARK:

HUN#	Name	Owner	Contact	Phone
204	ANGEL ISLAND STATE PARK	CDPR	DISPATCH	916-988-7322

WATER INTAKE:

HUN#	Name	Owner	Contact	Phone
299	PRESIDIO DRINKING WATER INTAKE	NPS	DISPATCH	415-561-5505