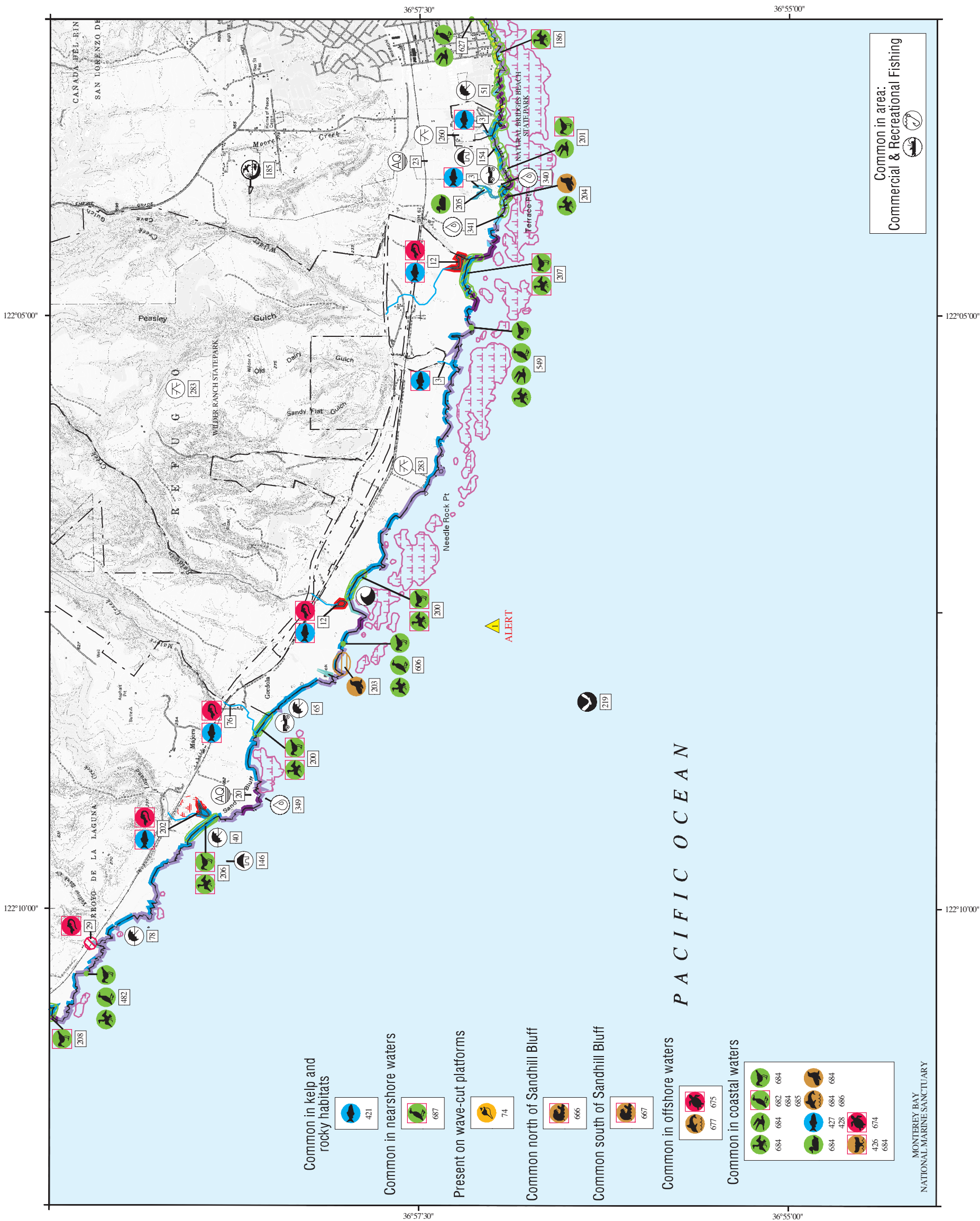


ENVIRONMENTAL SENSITIVITY INDEX MAP



**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
- 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
- 8B SHELTERED, SOLID, MAN-MADE STRUCTURES
- 8C SHELTERED RIPRAP
- 9A SHELTERED TIDAL FLATS
- 10A SALT- AND BRACKISH-WATER MARSHES
- 10B FRESHWATER MARSHES
- 10C SWAMPS
- 10D SCRUB-SHRUB WETLANDS

Prepared by: Research Planning, Inc.  
Columbia, South Carolina

1 0.5 0 1 KILOMETER

1 0.5 0 1 MILE

SCALE 1:50000

Not For Navigation

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California Department of Fish and Game

CALIFORNIA

MBNMS

PACIFIC OCEAN

Central California

**ESI-29**

Central California: ESIMAP 29

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
186	Brown pelican	E E 38-280 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	-	JUL-NOV	-
200	Brown pelican	E E 3-115 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	-	JUL-NOV	-
	Western snowy plover	T LOW	X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-
201	Gulls		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Shorebirds		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Western snowy plover	T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
204	Pelagic cormorant		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
205	Waterfowl	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
206	Brown pelican	E E	X	X	X	X	X	X	X	X	X	X	X	X	-	JUL-NOV	-
	Shorebirds		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Western snowy plover	T MEDIUM	X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-
207	Brown pelican	E E	X	X	X	X	X	X	X	X	X	X	X	X	-	JUL-NOV	-
	Shorebirds		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Western snowy plover	T HIGH	X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-
208	Western snowy plover	T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
482	Black oystercatcher	1 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-
	Pelagic cormorant	13 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-
	Pigeon guillemot	495 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
549	Black oystercatcher	6 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-
	Pelagic cormorant	31 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-
	Pigeon guillemot	232 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
	Western gull	6 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-
606	Black oystercatcher	3 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-
	Pelagic cormorant	2 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-
	Pigeon guillemot	245 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
627	Pigeon guillemot	205 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
	Western gull	2 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-
682	Sooty shearwater	MODERATE	X	X	X	X	X	X	X	X	X	X	X	X	-	-	APR-OCT
684	Cassin's auklet	MODERATE	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Clark's grebe	MODERATE	X	X	X	X	X	X	X	X	X	X	X	X	-	MAR-APR SEP-NOV	-
	Common murre	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	JUL-SEP
	Cormorants	MODERATE	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Eared grebe	LOW	X	X	X	X	X	X	X	X	X	X	X	X	-	MAR-APR SEP-OCT	-
	Gulls	MODERATE	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Horned grebe	LOW	X	X	X	X	X	X	X	X	X	X	X	X	-	OCT-APR	-
	Loons	MODERATE	X	X	X	X	X	X	X	X	X	X	X	X	-	OCT-MAY	-
	Pacific loon	MODERATE	X	X	X	X	X	X	X	X	X	X	X	X	-	OCT-MAY	-
	Pelicans	MODERATE	X	X	X	X	X	X	X	X	X	X	X	X	-	JUL-NOV	-
	Phalaropes	LOW	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Pigeon guillemot	MODERATE	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Rhinoceros auklet	MODERATE	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Shearwaters	LOW-MODERATE	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Surf scoter	MODERATE	X	X	X	X	X	X	X	X	X	X	X	X	-	MAR-APR SEP-DEC	-
	Western grebe	MODERATE	X	X	X	X	X	X	X	X	X	X	X	X	-	MAR-APR SEP-NOV	-
	White-winged scoter	LOW	X	X	X	X	X	X	X	X	X	X	X	X	-	MAR-APR OCT-NOV	-
685	Marbled murrelet	E T MODERATE	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	AUG-MAR	-
687	Marbled murrelet	E T HIGH	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	AUG-MAR	-

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
3	Tidewater goby	E	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	-	-	-	JAN-DEC
12	Steelhead	T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JUN-OCT	OCT-JUN
	Tidewater goby	E	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	-	-	-	JAN-DEC
76	Steelhead	T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JUN-OCT	OCT-JUN
202	Coho salmon	E E	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JUN-OCT	OCT-JUN
	Steelhead	T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JUN-OCT	OCT-JUN
	Tidewater goby	E	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	-	-	-	JAN-DEC
421	Black rockfish		X	X	X	X	X	X	X	X	X	X	X	X	JAN-MAY	-	-	APR-JUL	JAN-DEC
	Black-and-yellow rockfish		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-	MAY-JUL	JAN-DEC
	Blue rockfish		X	X	X	X	X	X	X	X	X	X	X	X	NOV-MAR	-	-	APR-JUL	JAN-DEC
	Bocaccio		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	Canary rockfish (orange)		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	China rockfish		X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUL	-	-	MAY-JUL	JAN-DEC
	Copper rockfish		X	X	X	X	X	X	X	X	X	X	X	X	FEB-APR	-	-	APR-JUL	JAN-DEC
	Gopher rockfish		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-	MAY-JUL	JAN-DEC
	Grass rockfish		X	X	X	X	X	X	X	X	X	X	X	X	JAN-MAR	-	-	MAY-JUL	JAN-DEC
	Kelp rockfish		X	X	X	X	X	X	X	X	X	X	X	X	FEB-APR	-	-	APR-AUG	JAN-DEC
	Olive rockfish		X	X	X	X	X	X	X	X	X	X	X	X	JAN-MAR	-	-	APR-JUL	JAN-DEC
	Vermilion rockfish		X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	-	-	FEB-JUL	JAN-DEC
	Widow rockfish		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	Yellowtail rockfish		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
427	California halibut		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUN	-	FEB-SEP	JAN-DEC	FEB-NOV
	Salmon		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	APR-SEP
428	Bat ray		X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-	-	MAR-SEP
	Leopard shark		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-	JAN-DEC	JAN-DEC
	Northern anchovy		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	MAY-SEP	MAY-SEP
	Pacific sardine		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JUN-SEP

INVERTEBRATE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
74	Black abalone		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC

MARINE MAMMAL:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Pupping	Molting
203	Harbor seal	309-332 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	-	-	MAR-JUN	-
204	California sea lion	MODERATE	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
426	Gray whale		X	X	X	X	X	X	X	X	X	X	X	X	-	DEC-FEB	-	-
666	Sea otter	T 50 INDEP / 7 PUPS	X	X	X	X	X	X	X	X	X	X	X	X	-	-	JAN-MAR SEP-NOV	-
667	Sea otter	T 189 INDEP / 27 PUPS	X	X	X	X	X	X	X	X	X	X	X	X	-	-	JAN-MAR SEP-NOV	-
677	Harbor porpoise	MODERATE	X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	JUN-AUG	-	-
684	Blue whale	E LOW	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Bottlenose dolphin	MODERATE	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Dall's porpoise	MODERATE	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Fin whale	E LOW	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Humpback whale	E MODERATE	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Killer whale	LOW	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Long-beaked common dolphin	LOW	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Minke whale	LOW	X	X	X	X	X	X	X	X	X	X	X	X	-	MAR-MAY	-	-
	Northern right whale	E LOW	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Pacific white-sided dolphin	LOW	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-

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.

Central California: ESIMAP 29 (cont.)

BIOLOGICAL RESOURCES: (cont.)

MARINE MAMMAL: (cont.)

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting
684	Risso's dolphin	LOW	X X X X X X X X X X X	-	-	-	-
	Sea lions	MODERATE	X X X X X X X X X X X	-	-	-	-
	Seals	LOW-MODERATE	X X X X X X X X X X X	-	-	-	-
	Short-beaked common dolphin	LOW	X X X X X X X X X X X	-	-	-	-
	Short-finned pilot whale	LOW	X X X X X X X X X X X	-	-	-	-
686	Harbor porpoise	1600 INDIV.	X X X X X X X X X X X	JUL-SEP	JUN-AUG	-	-

REPTILE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Interesting	Juveniles	Adults
12	California red-legged frog	T	X X X X X	-	-	-	JUN-OCT	-
29	California red-legged frog	T	X X X X X X X X X X X	NOV-APR	-	-	JAN-DEC	JAN-DEC
76	California red-legged frog	T	X X X X X	-	-	-	JUN-OCT	-
202	California red-legged frog	T	X X X X X	-	-	-	JUN-OCT	-
674	Leatherback sea turtle	E HIGH	X X X X X X X	-	-	-	-	MAY-NOV
675	Leatherback sea turtle	E MODERATE	X X X X X X X	-	-	-	-	MAY-NOV

HUMAN USE RESOURCES:

ALERT:

ID#	Description
1	Keep out of kelp when transiting. Note potential presence of sea otters if operating outboard motor.

AQUACULTURE:

HUN#	Name	Contact	Phone
20	SAND HILL BLUFF		
23	U.S. ABALONE		

BEACH:

HUN#	Name	Contact	Phone
40	LAGUNA CREEK BEACH		
51	NATURAL BRIDGES STATE PARK		
65	RED, WHITE AND BLUE BEACH		
78	YELLOWBANK BEACH		

SAMPLING SITE:

HUN#	Name	Contact	Phone
146	PISCO:SAND HILL	PETE RAIMONDI	831/459-5674
154	PISCO:TERRACE POINT	PETE RAIMONDI	831/459-5674

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
185	MOORE CREEK CE	CA DEPT OF FISH AND GAME	

MARINE SANCTUARY:

HUN#	Name	Contact	Phone
219	MONTEREY BAY NATIONAL MARINE SANCTUARY	SUPERINTENDENT	831/647-4201

PARK:

HUN#	Name	Contact	Phone
260	NATURAL BRIDGES SB	CA DEPT OF PARKS AND RECREATION	
283	WILDER RANCH SP	CA DEPT OF PARKS AND RECREATION	

WATER INTAKE:

HUN#	Name	Contact	Phone
340	LONG MARINE LAB		
341	LONG MARINE LAB		
349	SAND HILL BLUFF		