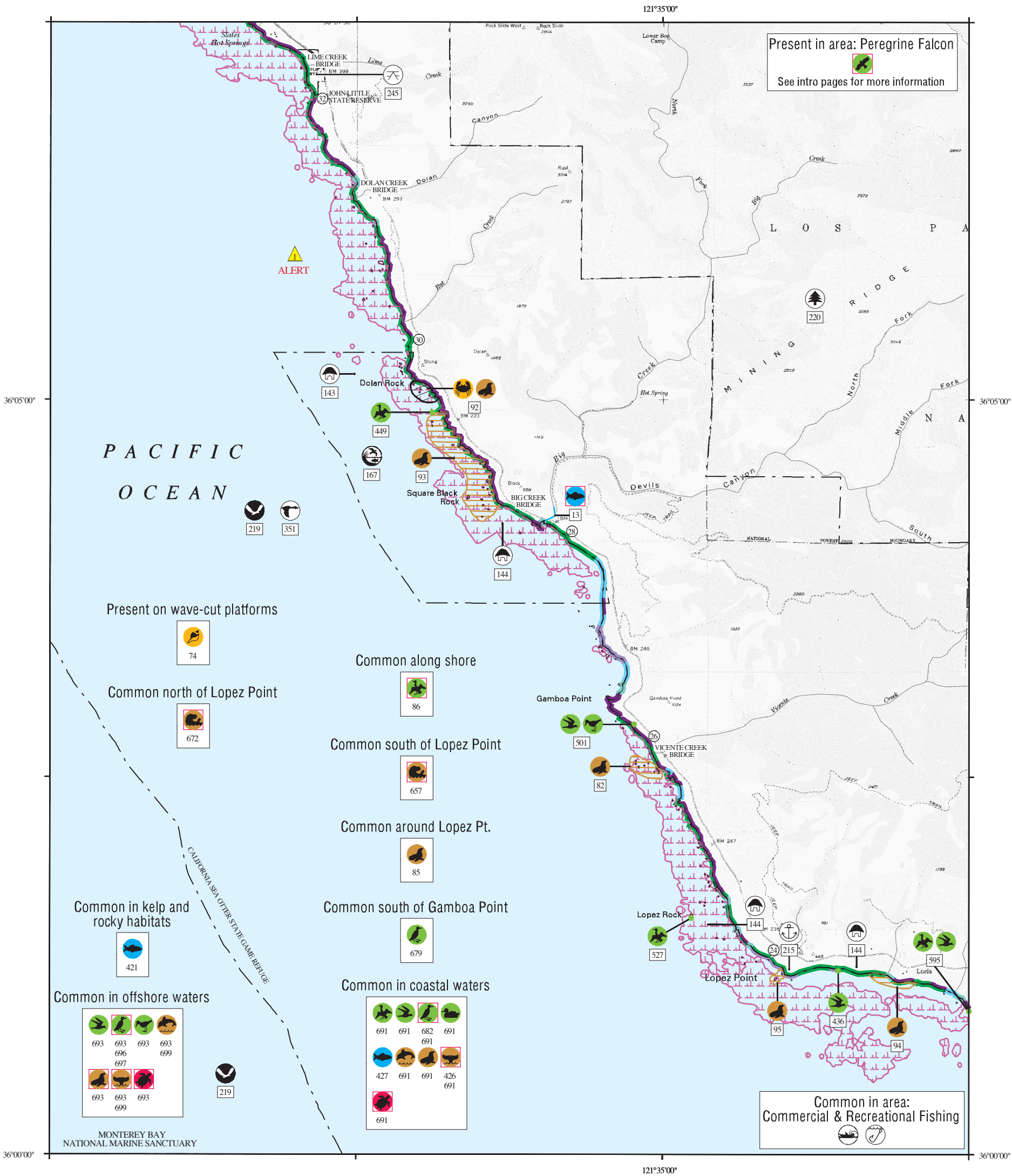


ENVIRONMENTAL SENSITIVITY INDEX MAP



**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

W N E S

1 0.5 0 1 KILOMETER

1 0.5 0 1 MILE

SCALE 1:50000

Not For Navigation  
Published: May 2006  
Published for  
Monterey Bay National Marine Sanctuary  
and  
Office of Spill Prevention and Response  
California Department of Fish and Game

CALIFORNIA

PACIFIC OCEAN

Central California ESI-19

Central California: ESIMAP 19

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting
86	Brown pelican	E E 4-526 INDIV.	X X X X X X X X X X X X	-	JUL-NOV	-
436	Western gull	2 INDIV.	X X X X X X X X X X X X	MAR-AUG	-	-
449	Pelagic cormorant	11 INDIV.	X X X X X X X X X X X X	MAR-SEP	-	-
501	Black oystercatcher	1 INDIV.	X X X X X X X X X X X X	MAR-SEP	-	-
	Western gull	4 INDIV.	X X X X X X X X X X X X	MAR-AUG	-	-
527	Brandt's cormorant	114 INDIV.	X X X X X X X X X X X X	FEB-AUG	-	-
595	Brandt's cormorant	7 INDIV.	X X X X X X X X X X X X	FEB-AUG	-	-
	Double-crested cormorant	26 INDIV.	X X X X X X X X X X X X	MAR-AUG	-	-
	Pelagic cormorant	33 INDIV.	X X X X X X X X X X X X	MAR-SEP	-	-
	Western gull	7 INDIV.	X X X X X X X X X X X X	MAR-AUG	-	-
679	Sooty shearwater	HIGH	X X X X	-	-	JUN-SEP
682	Sooty shearwater	MODERATE	X X X X X X X X	-	-	APR-OCT
691	Black-footed albatross	LOW	X X X X X X X X	-	-	-
	Clark's grebe	LOW	X X X X	X X X X	MAR-APR SEP-NOV	-
	Common murre	LOW	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	MAR-APR SEP-OCT	-
	Gulls	LOW	X X X X X X X X X X X X	-	-	-
	Horned grebe	LOW	X X X X	X X X X	OCT-APR	-
	Loons	LOW	X X X X X	X X X	OCT-MAY	-
	Marbled murrelet	E T LOW	X X X X X X X X X X X X	-	-	-
	Pacific loon	LOW	X X X X X	X X X	OCT-MAY	-
	Pelicans	LOW	X X X X X X X X X X	-	JUL-NOV	-
	Pigeon guillemot	LOW	X X X X X X X	-	-	-
	Rhinoceros auklet	LOW	X X X X X X X X X X X X	-	-	-
	Seabirds	LOW	X X X X X X X X X X X X	-	-	-
	Shearwaters	LOW	X X X X X X X X X X X X	-	-	-
	Surf scoter	LOW	X X X X	X X X X	MAR-APR SEP-DEC	-
	Western grebe	LOW	X X X X	X X X X	MAR-APR SEP-NOV	-
	White-winged scoter	LOW	X X X X	X X X	MAR-APR OCT-NOV	-
693	Black-footed albatross	MODERATE	X X X X X X X X	-	-	-
	Common murre	LOW-MODERATE	X X X X X X X X X X X X	-	-	JUL-SEP
	Gulls	LOW	X X X X X X X X X X X X	-	-	-
	Phalaropes	MODERATE	X X X X X X X X X X X X	-	-	-
	Rhinoceros auklet	LOW	X X X X X X X X X X X X	-	-	-
	Shearwaters	LOW	X X X X X X X X X X X X	-	-	-
	Sooty shearwater	LOW	X X X X X X X X X X	-	-	APR-OCT
	Xantus' murrelet	T MODERATE	X X X X	-	-	-
696	Ashy storm-petrel	MODERATE	X X X X X X X X X X X X	-	-	-
	Storm-petrels	MODERATE	X X X X X X X X X X	-	-	-
697	Cassin's auklet	MODERATE	X X 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
13	Steelhead	T	X X X X X X X X X X X X	-	-	-	JUN-OCT	OCT-JUN
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	-	-	-	-	APR-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
92	Invertebrates	HIGH	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
82	Harbor seal	1 INDIV.	X X X X X X X X X X X X	-	-	MAR-MAY	-
85	Pinnipeds	HIGH	X X X X X X X X X X X X	-	-	-	-
92	Harbor seal	22-48 INDIV.	X X X X X X X X X X X X	-	-	MAR-MAY	-
93	Harbor seal	134-173 INDIV.	X X X X X X X X X X X X	-	-	MAR-MAY	-
94	Harbor seal	34 INDIV.	X X X X X X X X X X X X	-	-	MAR-MAY	-
95	California sea lion	6-72 INDIV.	X X X X X X X X X X X X	-	-	-	-
	Harbor seal	19 INDIV.	X X X X X X X X X X X X	-	-	MAR-MAY	-
426	Gray whale		X X X X X	X X	DEC-FEB	-	-
657	Sea otter	T 329 INDEP / 50 PUPS	X X X X X X X X X X X X	-	-	JAN-MAR SEP-NOV	-
672	Sea otter	T 268 INDEP / 57 PUPS	X X X X X X X X X X X X	-	-	JAN-MAR SEP-NOV	-
691	Blue whale	E LOW	X X X X X X X X X X	-	-	-	-
	Bottlenose dolphin	LOW	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	-	-	-	-
	Harbor porpoise	LOW	X X X X X X X X X X X X	JUL-SEP	JUN-AUG	-	-
	Humpback whale	E MODERATE	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	MODERATE	X X X X X X X X X X X X	-	MAR-MAY	-	-
	Northern right whale	E LOW	X X X	-	-	-	-
	Northern right-whale dolphin	LOW	X X X X X X X X X X X X	-	-	-	-
	Pacific white-sided dolphin	MODERATE	X X X X X X X X X X X X	-	-	-	-
	Risso's dolphin	MODERATE	X X X X X X X X X X X X	-	-	-	-
	Sea lions	LOW-MODERATE	X 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 X	-	-	-	-
	Short-beaked common dolphin	LOW	X 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 X	-	-	-	-
693	Baird's beaked whale	LOW	X X X X X X X X X	-	-	-	-
	California sea lion	LOW	X X X X X X X X X X X X	-	-	-	-
	Cuvier's beaked whale	LOW	X X X X X X X X X X X X	-	-	-	-
	Dwarf sperm whale	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 impactsto protected species.

Central California: ESIMAP 19 (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
693	Fin whale	E MODERATE	X X X X X X X X X X X	-	-	-	-
	Guadalupe fur seal	T T LOW	X X X X X X X X X X X	-	-	-	-
	Harbor seal	LOW	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	-	-	-	-
	Long-beaked common dolphin	LOW	X X X X X X X X X X X	-	-	-	-
	Mesoplodont beaked whales	LOW	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	-	MAR-MAY	-	-
	Northern elephant seal	MODERATE	X X X X X X X X X X X	-	-	-	-
	Northern fur seal	MODERATE	X X X X X X X X X X X	-	-	-	-
	Northern right whale	E LOW	X X X	-	-	-	-
	Northern right-whale dolphin	MODERATE	X X X X X X X X X X X	-	-	-	-
	Pacific white-sided dolphin	MODERATE	X X X X X X X X X X X	-	-	-	-
	Pygmy sperm whale	LOW	X X X X X X X X X X X	-	-	-	-
	Risso's dolphin	MODERATE	X X X X X X X X X X X	-	-	-	-
	Sei whale	E LOW	X X X X X X X X X X X	-	SEP-MAR	-	-
	Short-beaked common dolphin	MODERATE	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	-	-	-	-
	Sperm whale	E LOW	X X X X X X X X X X X	MAR-JUN	JUN-OCT	-	-
	Steller sea lion	T LOW	X X X X X X X X X X X	-	-	-	-
699	Blue whale	E MODERATE	X X X X X X X X X	-	-	-	-
	Dall's porpoise	LOW	X X X X X X X X X X X	-	-	-	-
	Dolphins	LOW-MODERATE	X X X X X X X X X X X	-	-	-	-
	Humpback whale	E MODERATE	X X X X X X X X X	-	-	-	-

REPTILE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Interesting	Juveniles	Adults
691	Leatherback sea turtle	E LOW	X X X X X X X	-	-	-	-	MAY-NOV
693	Leatherback sea turtle	E LOW	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.

SAMPLING SITE:

HUN#	Name	Contact	Phone
143	PISCO:QUALITATIVE	STEVE LONHART	831/647-4222
144	PISCO:QUANTITATIVE	STEVE LONHART	831/647-4222

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
167	BIG CREEK - SMR	CDF&G	

MARINA:

HUN#	Name	Contact	Phone
215	POINT LOPEZ		

MARINE SANCTUARY:

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

NATIONAL FOREST:

HUN#	Name	Contact	Phone
220	LOS PADRES NATIONAL FOREST	USDA FOREST SERVICE	

PARK:

HUN#	Name	Contact	Phone
245	JOHN LITTLE SR	CA DEPT OF PARKS AND RECREATION	

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
351	CALIFORNIA SEA OTTER GAME REFUGE	CDF&G	