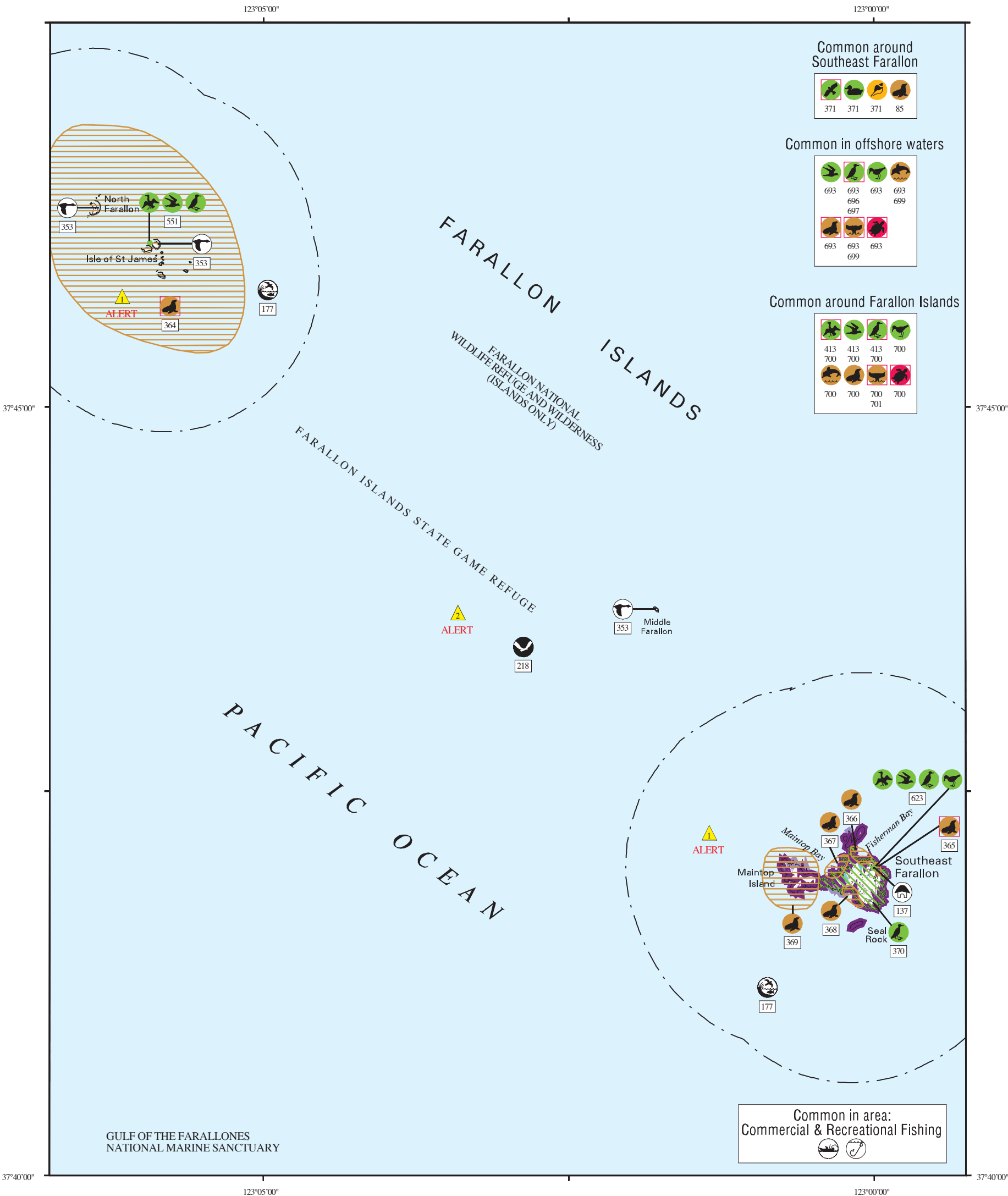


ENVIRONMENTAL SENSITIVITY INDEX MAP



SHORELINE HABITATS (ESI)

1A EXPOSED ROCKY SHORES	10A SALT- AND BRACKISH-WATER MARSHES
1B EXPOSED, SOLID, MAN-MADE STRUCTURES	10B FRESHWATER MARSHES
2A EXPOSED WAVE-CUT PLATFORMS IN BEDROCK	10C SWAMPS
3A FINE- TO MEDIUM-GRAINED SAND BEACHES	10D SCRUB-SHRUB WETLANDS
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	

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Central California ESI-41

Central California: ESIMAP 41

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
370	Seabirds	HIGH	X	X	X	X	X	X	X						FEB-AUG	-	-
371	American peregrine falcon	E	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Waterfowl		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
413	Diving birds	15000 INDIV.	X	X	X	X	X	X	X						FEB-AUG	-	-
	Gulls	20000 INDIV.	X	X	X	X	X	X	X						FEB-AUG	-	-
	Seabirds	300000 INDIV.	X	X	X	X	X	X	X						FEB-AUG	-	-
551	Brandt's cormorant	161 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
	Common murre	65000 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	DEC-JUL	-	-
	Pelagic cormorant	62 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-
	Pigeon guillemot	42 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
	Western gull	32 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-
623	Ashy storm-petrel	1990 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	FEB-NOV	-	-
	Black oystercatcher	22 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-
	Brandt's cormorant	12000 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
	Cassin's auklet	18807 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
	Common murre	103588 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	DEC-JUL	-	-
	Double-crested cormorant	486 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-
	Leach's storm-petrel	1400 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	FEB-OCT	-	-
	Pelagic cormorant	442 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-
	Pigeon guillemot	1000 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
	Rhinoceros auklet	516 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	APR-SEP	-	-
	Tufted puffin	128 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	APR-NOV	-	-
	Western gull	19000 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-
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	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	X	X	-	-	-
697	Cassin's auklet	MODERATE	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
700	Ashy storm-petrel	LOW	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Black-footed albatross	MODERATE	X	X	X	X	X	X	X				X		-	-	-
	Brown pelican	E E LOW	X	X	X	X	X	X	X	X	X	X	X	X	-	JUL-NOV	-
	Cassin's auklet	MODERATE	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	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	-	-	-
	Gulls	MODERATE	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Loons	LOW	X	X	X	X			X	X	X				-	OCT-MAY	-
	Pacific loon	LOW	X	X	X	X			X	X	X				-	OCT-MAY	-
	Phalaropes	MODERATE	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	FEB-AUG	-	-
	Rhinoceros auklet	MODERATE	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Shearwaters	MODERATE	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Sooty shearwater	MODERATE	X	X	X	X	X	X	X	X	X	X	X	X	-	-	APR-OCT
	Storm-petrels	LOW	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Xantus' murrelet	T LOW							X	X	X	X			-	-	-

INVERTEBRATE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
371	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
85	Pinnipeds	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
364	California sea lion	2-502 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	-	-	MAY-AUG	-
	Steller sea lion	T 2-55 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	-	-	MAY-AUG	-
365	California sea lion	1327-11553 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	-	-	MAY-AUG	-
	Steller sea lion	T 54-215 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	-	-	MAY-AUG	-
366	Harbor seal	6 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	-	-	MAR-JUN	-
367	Harbor seal	30-166 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	-	-	MAR-JUN	-
368	Harbor seal	105 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	-	-	MAR-JUN	-
369	Northern elephant seal	200-800 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	NOV-MAR	-	DEC-MAR	APR-JUL
	Northern fur seal	20-100 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	-	-	MAY-AUG	-
693	Baird's beaked whale	LOW				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	-	-	-	-
	Fin whale	E MODERATE	X	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	X	-	-	-	-
	Harbor seal	LOW	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	-	-	-	-
	Mesoplodont beaked whales	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 elephant seal	MODERATE	X	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	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	X	-	-	-	-
	Pacific white-sided dolphin	MODERATE	X	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	X	-	-	-	-
	Risso's dolphin	MODERATE	X	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	X	-	SEP-MAR	-	-
	Short-beaked common dolphin	MODERATE	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	-	-	-	-
	Sperm whale	E LOW	X	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	X	-	-	-	-
699	Blue whale	E MODERATE						X	X	X	X	X	X		-	-	-	-
	Dall's porpoise	LOW	X	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	X	-	-	-	-
	Humpback whale	E MODERATE	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
700	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	-	-
	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	MODERATE	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	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	-	-	-	-

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 41 (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
700	Short-finned pilot whale	LOW	X X X X X X X X X X X	-	-	-	-
701	Blue whale	E MODERATE	X X X X X X	-	-	-	-
	Humpback whale	E MODERATE	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
693	Leatherback sea turtle	E LOW	X X X X X X X	-	-	-	-	MAY-NOV
700	Leatherback sea turtle	E LOW	X X X X X X X	-	-	-	-	MAY-NOV

HUMAN USE RESOURCES:

ALERT:

ID#	Description
1	Marine sanctuary, keep aircraft away year round. Emergency helicopter landing by permission from the Incident Commander.
2	Major seabird and marine mammal hot spot, entire area.

SAMPLING SITE:

HUN#	Name	Contact	Phone
137	PISCO:MUSSEL FLAT, USFWS, PRBO	PETE RAIMONDI, JOELLE BUFFA	831/459-5674

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
177	FARALLON ISLANDS - SMCA	CDF&G	

MARINE SANCTUARY:

HUN#	Name	Contact	Phone
218	GULF OF THE FARALLONES NMS	NOAA	415/561-6622

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
353	FARALLON NWR	US FISH AND WILDLIFE SERVICE	510/792-0222