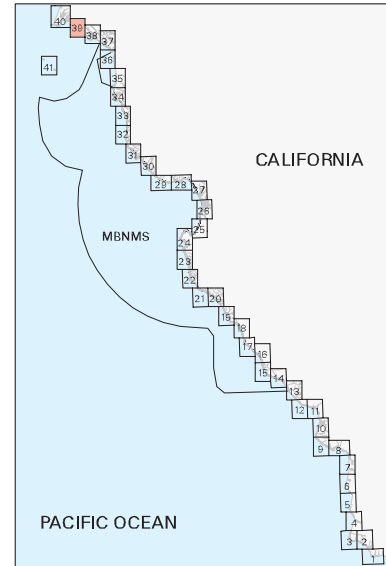
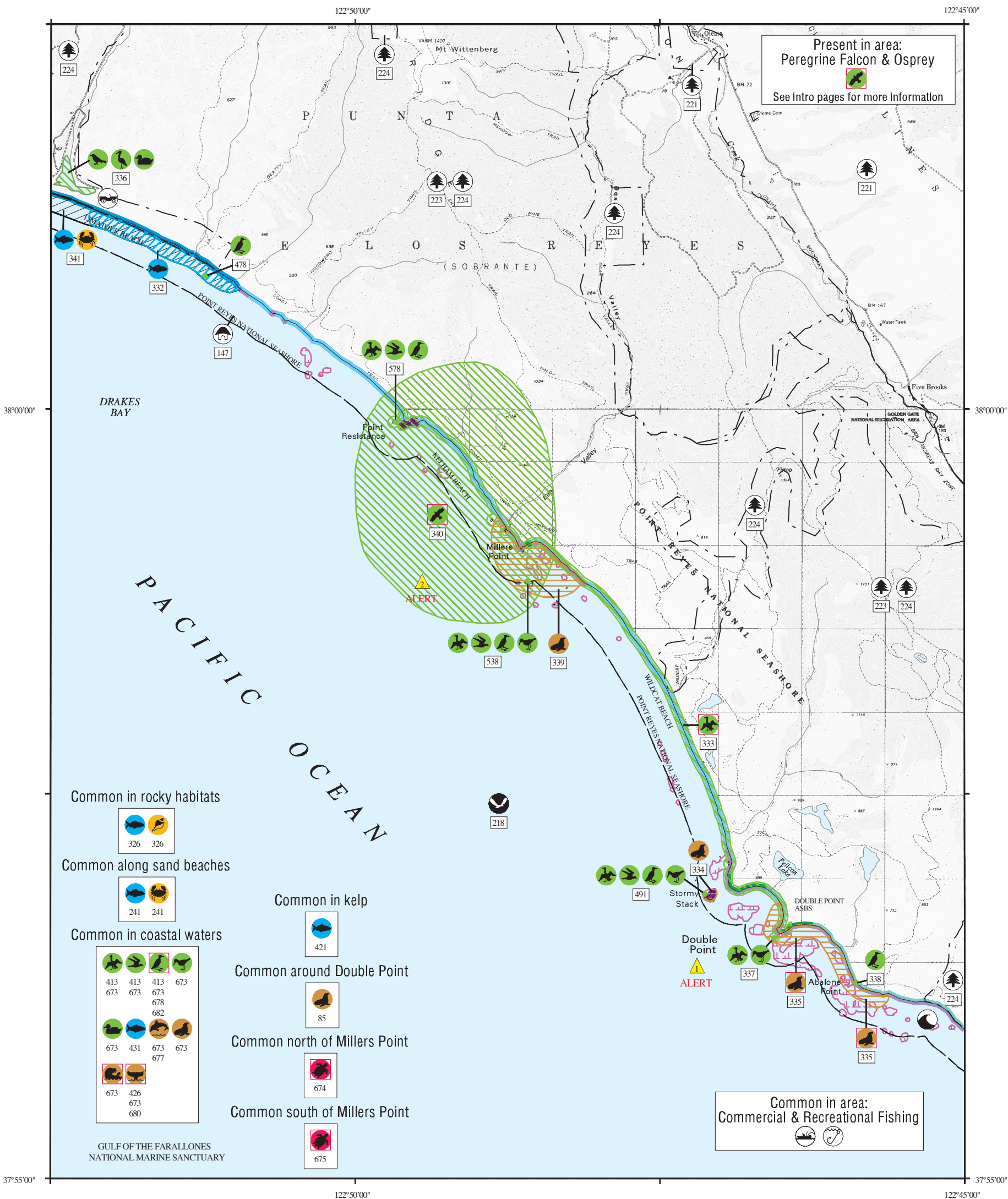


ENVIRONMENTAL SENSITIVITY INDEX MAP



Central California: ESIMAP 39

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
333	Brown pelican	E E 16-957 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	-	JUL-NOV	-
336	American bittern		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Common yellowthroat		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	APR-MAY	-
	Dabbling ducks		X	X	X	X	X			X	X	X	X		-	SEP-OCT	-
	Wading birds		X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
337	Black oystercatcher		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-
	Pelagic cormorant		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-
338	Pigeon guillemot		X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
340	American peregrine falcon	E	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
413	Diving birds	15000 INDIV.	X	X	X	X	X	X	X						FEB-AUG	-	-
	Gulls	20000 INDIV.	X	X	X	X	X	X							FEB-AUG	-	-
	Seabirds	300000 INDIV.	X	X	X	X	X	X							FEB-AUG	-	-
478	Pigeon guillemot	63 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
491	Ashy storm-petrel	30 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	FEB-NOV	-	-
	Black oystercatcher	2 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-
	Brandt's cormorant	180 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
	Common murre	4464 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	DEC-JUL	-	-
	Pelagic cormorant	9 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-
	Pigeon guillemot	22 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
	Western gull	8 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-
538	Black oystercatcher	1 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-
	Brandt's cormorant	114 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
	Common murre	358 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	DEC-JUL	-	-
	Pelagic cormorant	59 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-
	Pigeon guillemot	55 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
	Western gull	30 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-
578	Brandt's cormorant	46 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
	Common murre	3518 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	DEC-JUL	-	-
	Pelagic cormorant		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-
	Pigeon guillemot	50 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
	Western gull	8 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-
673	Cassin's auklet	LOW	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Clark's grebe	MODERATE	X	X	X	X				X	X	X	X		-	MAR-APR	-
																SEP-NOV	
	Common murre	MODERATE	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	MODERATE	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	-
	Pacific loon	MODERATE	X	X	X	X				X	X	X			-	OCT-MAY	-
	Pelicans	MODERATE		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	LOW	X	X	X	X	X	X	X						-	-	-
	Rhinoceros auklet	MODERATE	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Shearwaters	LOW-HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Surf scoter	MODERATE	X	X	X	X				X	X	X	X		-	MAR-APR	-
																SEP-DEC	
	Western grebe	MODERATE	X	X	X	X				X	X	X	X		-	MAR-APR	-
																SEP-NOV	
	White-winged scoter	MODERATE	X	X	X	X				X	X	X			-	MAR-APR	-
																OCT-NOV	
678	Marbled murrelet	E T MODERATE	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
682	Sooty shearwater	MODERATE	X	X	X	X	X	X	X	X	X	X			-	-	APR-OCT

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
241	Barred surfperch		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	MAR-NOV
	Calico surfperch		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	MAR-NOV
	California grunion			X	X	X	X	X	X						MAR-AUG	MAR-SEP	-	-	MAR-AUG
	Jacksmelt		X	X	X	X	X	X	X	X	X	X	X	X	NOV-JUN	NOV-JUN	NOV-JUN	APR-NOV	NOV-JUN
	Redtail surfperch		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Striped bass			X	X	X	X	X							-	-	-	MAY-SEP	MAY-SEP
	Walleye surfperch		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC
	White seabass			X	X	X	X	X	X	X	X				APR-AUG	-	-	-	MAR-NOV
	White seaperch		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	FEB-AUG
326	Cabezon		X	X	X	X	X	X	X	X	X	X	X	X	OCT-APR	-	-	JAN-DEC	JAN-DEC
	Lingcod		X	X	X	X	X	X	X	X	X	X	X	X	NOV-APR	DEC-APR	-	JAN-DEC	JAN-DEC
	Monkeyface prickleback		X	X	X	X	X	X	X	X	X	X	X	X	JAN-APR	-	-	JAN-DEC	JAN-DEC
	Rubberlip seaperch		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Striped seaperch		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-	-	JAN-DEC
332	Night smelt		X	X	X	X	X								FEB-JUN	-	-	-	FEB-JUN
	Surf smelt			X	X	X	X	X	X						APR-SEP	-	-	-	APR-SEP
341	California grunion			X	X	X	X	X	X						MAR-AUG	MAR-SEP	-	-	MAR-AUG
	Jacksmelt		X	X	X	X	X	X	X	X	X	X	X	X	NOV-JUN	NOV-JUN	NOV-JUN	APR-NOV	NOV-JUN
	Striped bass			X	X	X	X	X							-	-	-	MAY-SEP	MAY-SEP
	White seabass			X	X	X	X	X	X	X	X				APR-AUG	-	-	-	MAR-NOV
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	-
431	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							-	-	-	-	APR-SEP
	White shark		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC

INVERTEBRATE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
241	Dungeness crab							X	X	X	X				-	-	-	-	JUN-SEP
326	Black abalone		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
341	Dungeness crab							X	X	X	X				-	-	-	-	JUN-SEP

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	-	-	-	-
334	California sea lion	94-300 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
335	Harbor seal	885-939 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	-	-	MAR-JUN	-

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 39 (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
335	Steller sea lion	T	X X X X X X X X X X X X	-	-	-	-
339	Harbor seal		X X X X X X X X X X X X	-	-	MAR-JUN	-
426	Gray whale		X X X X X X X X	-	DEC-FEB	-	-
673	Bottlenose dolphin	LOW	X X X X X X X X X X X X	-	-	-	-
	Dall's porpoise	LOW	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	-	-	-	-
	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 X X X	-	-	-	-
	Pacific white-sided dolphin	LOW	X X X X X X X X X X X X	-	-	-	-
	Risso's dolphin	LOW	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	-	-	-	-
	Sea otter	T 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	-	-	-	-
	Short-finned pilot whale	LOW	X X X X X X X X X X X X	-	-	-	-
677	Harbor porpoise	MODERATE	X X X X X X X X X X X X	JUL-SEP	JUN-AUG	-	-
680	Blue whale	E LOW	X X X X X X	-	-	-	-
	Humpback whale	E MODERATE	X 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	Internesting	Juveniles	Adults
674	Leatherback sea turtle	E HIGH	X X X X X X X X	-	-	-	-	MAY-NOV
675	Leatherback sea turtle	E MODERATE	X X X X X X X X	-	-	-	-	MAY-NOV

HUMAN USE RESOURCES:

ALERT:

ID#	Description
1	Seabird colony and harbor seal breeding colony, keep aircraft away, March -July.
2	Seabird colony, keep helicopters away, March -July.

SAMPLING SITE:

HUN#	Name	Contact	Phone
147	PISCO:SANTA MARIA CREEK, NPS	PETE RAIMONDI	831/459-5674

MARINE SANCTUARY:

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

NATIONAL PARK:

HUN#	Name	Contact	Phone
221	GOLDEN GATE NATIONAL RECREATION AREA	NATIONAL PARK SERVICE	415/561-4700
223	PHILIP BURTON WILDERNESS	NATIONAL PARK SERVICE	415/464-5100
224	POINT REYES NATIONAL SEASHORE	NATIONAL PARK SERVICE	415/464-5100