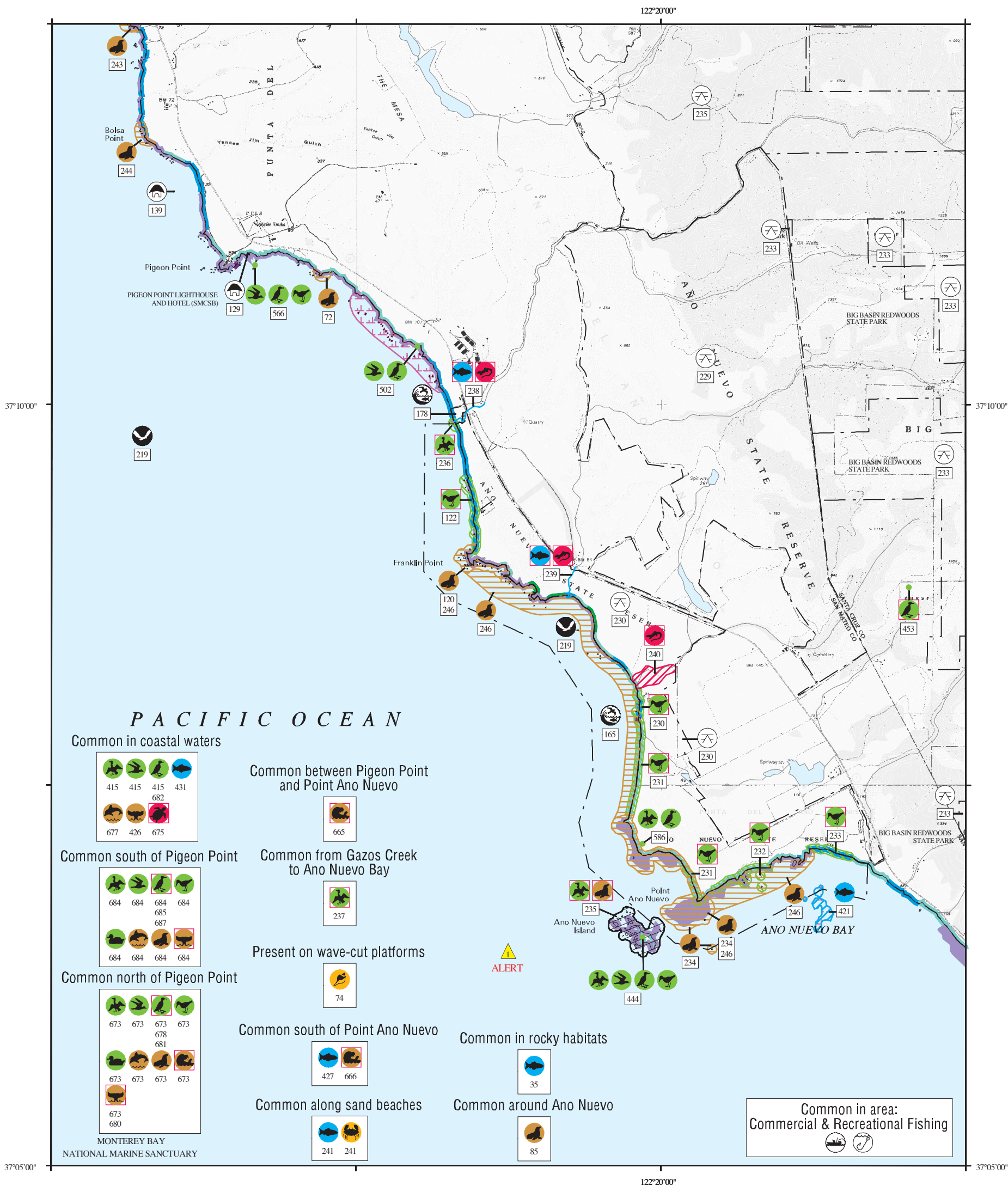


ENVIRONMENTAL SENSITIVITY INDEX MAP



- 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

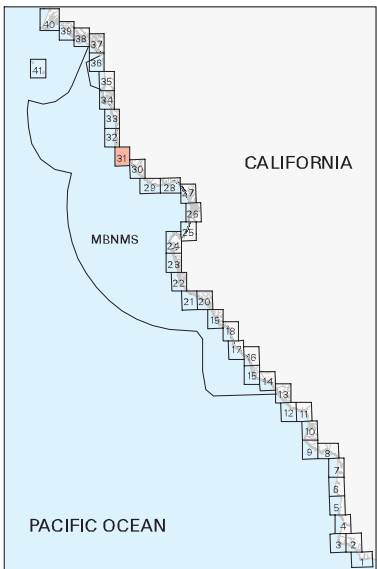
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Columbia, South Carolina

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Office of Spill Prevention and Response
California Department of Fish and Game



Central California: ESIMAP 31

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
122	Western snowy plover	T	X	X	X	X		X	X	X	X	X	X		-	-	-
230	Western snowy plover	T LOW	X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-
231	Western snowy plover	T MEDIUM	X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-
232	Western snowy plover	T	X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-
233	Western snowy plover	T	X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-
235	Brown pelican	E E 1388-5229 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	-	JUL-NOV	-
236	Brown pelican	E E 12-77 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	-	JUL-NOV	-
237	Brown pelican	E E 38-1438 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	-	JUL-NOV	-
415	Diving birds	8000 INDIV.	X	X	X	X	X	X	X						FEB-AUG	-	-
	Gulls	1400 INDIV.	X	X	X	X	X	X							FEB-AUG	-	-
	Seabirds	1300 INDIV.	X	X	X	X	X	X							FEB-AUG	-	-
444	Black oystercatcher	27 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-
	Brandt's cormorant	4 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
	Cassin's auklet	24 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
	Double-crested cormorant		X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-
	Pelagic cormorant	13 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-
	Pigeon guillemot	117 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
	Rhinoceros auklet	224 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	APR-SEP	-	-
	Western gull	1382 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-
453	Marbled murrelet	E T 600 INDIV.						X	X	X	X	X	X		-	-	-
502	Pigeon guillemot	8 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
	Western gull	4 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-
566	Black oystercatcher	2 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-
	Pigeon guillemot	8 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	-	-
586	Pelagic cormorant	114 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-
	Pigeon guillemot	102 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	FEB-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	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	-	-
681	Marbled murrelet	E T HIGH	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				-	-	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		-	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		-	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	-
	Loons	MODERATE	X	X	X	X				X	X				-	OCT-MAY	-
	Pacific loon	MODERATE	X	X	X	X				X	X				-	OCT-MAY	-
	Pelicans	MODERATE		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					-	-	-
	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		-	MAR-APR SEP-DEC	-
	Western grebe	MODERATE	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	-
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
35	Black-and-yellow rockfish		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-	MAY-JUL	JAN-DEC
	Cabezon		X	X	X	X	X	X	X	X	X	X	X	X	OCT-APR	-	-	JAN-DEC	JAN-DEC
	Calico surfperch		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	MAR-NOV
	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
	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
	Walleye surfperch		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC
238	Coho salmon	E E	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		-	-	-	JUN-OCT	OCT-JUN
239	Steelhead	T	X	X	X	X	X	X	X	X	X	X	X		-	-	-	JUN-OCT	OCT-JUN
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								-	-	-	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
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

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 31 (cont.)

BIOLOGICAL RESOURCES: (cont.)

FISH: (cont.)

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
421	Olive rockfish		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	SEP-NOV	-	-	FEB-JUL	JAN-DEC
	Widow rockfish		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	-	-	-	JAN-DEC	-
427	California halibut		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
431	California halibut		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	-	-	-	-	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
74	Black abalone		X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
241	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
72	Harbor seal	4 INDIV.	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	-	-	-	-
120	Harbor seal	15 INDIV.	X X X X X X X X X X X	-	-	MAR-MAY	-
234	Harbor seal	36-43 INDIV.	X X X X X X X X X X X	-	-	MAR-MAY	-
235	California sea lion	2301-9439 INDIV.	X X X X X X X X X X X	-	-	MAY-JUL	-
	Harbor seal	84-98 INDIV.	X X X X X X X X X X X	-	-	MAR-MAY	-
	Northern elephant seal		X X X X X X X X X X X	NOV-MAR	-	DEC-MAR	APR-JUL
	Steller sea lion	T	X X X X X X X X X X X	-	-	MAY-AUG	-
243	Harbor seal	87-232 INDIV.	X X X X X X X X X X X	-	-	MAR-MAY	-
244	Harbor seal	7 INDIV.	X X X X X X X X X X X	-	-	MAR-MAY	-
246	Northern elephant seal	10000 INDIV.	X X X X X X X X X X X	NOV-MAR	-	DEC-MAR	APR-JUL
426	Gray whale		X X X X X X X	-	DEC-FEB	-	-
665	Sea otter	T 6 INDEP / 1 PUPS	X X X X X X X X X X X	-	-	JAN-MAR SEP-NOV	-
666	Sea otter	T 50 INDEP / 7 PUPS	X X X X X X X X X X X	-	-	JAN-MAR SEP-NOV	-
673	Bottlenose dolphin	LOW	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	-	-	-	-
	Fin whale	E 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	-	-	-	-
	Minke whale	MODERATE	X X X X X X X X X X X	-	MAR-MAY	-	-
	Northern right whale	E LOW	X X X	-	-	-	-
	Pacific white-sided dolphin	LOW	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	-	-	-	-
	Sea lions	LOW-MODERATE	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	-	-	-	-
	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	-	-	-	-
677	Harbor porpoise	MODERATE	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 X	-	-	-	-
	Humpback whale	E MODERATE	X X X X X X X X	-	-	-	-
684	Blue whale	E LOW	X X X X X X	-	-	-	-
	Bottlenose dolphin	MODERATE	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	-	-	-	-
	Fin whale	E LOW	X X X X X X X X X X X	-	-	-	-
	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	-	-	-	-
	Long-beaked common dolphin	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 right whale	E LOW	X X X	-	-	-	-
	Pacific white-sided dolphin	LOW	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	-	-	-	-
	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	-	-	-	-

REPTILE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Interneesting	Juveniles	Adults
238	California red-legged frog	T	X X X X X	-	-	-	JUN-OCT	-
	San Francisco garter snake	E E	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
239	California red-legged frog	T	X X X X X	-	-	-	JUN-OCT	-
	San Francisco garter snake	E E	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
240	California red-legged frog	T	X X X X X	-	-	-	JUN-OCT	-
	San Francisco garter snake	E E	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
675	Leatherback sea turtle	E MODERATE	X X X X X X X	-	-	-	-	MAY-NOV

HUMAN USE RESOURCES:

ALERT:

ID#	Description
1	Keep aircraft away year-round. Restrict all vehicles except with escorts.

SAMPLING SITE:

HUN#	Name	Contact	Phone
129	PISCO:GFNMS	JAN ROLETTO	415/561-6622
139	PISCO:PIGEON POINT	PETE RAIMONDI	831/459-5674

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
165	ANO NUEVO INVERTEBRATE AREA	CDF&G	
178	GAZOS CREEK FA	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
229	ANO NUEVO SP	CA DEPT OF PARKS AND RECREATION	
230	ANO NUEVO SR	CA DEPT OF PARKS AND RECREATION	
233	BIG BASIN REDWOODS SP	CA DEPT OF PARKS AND RECREATION	
235	BUTANO SP	CA DEPT OF PARKS AND RECREATION	

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