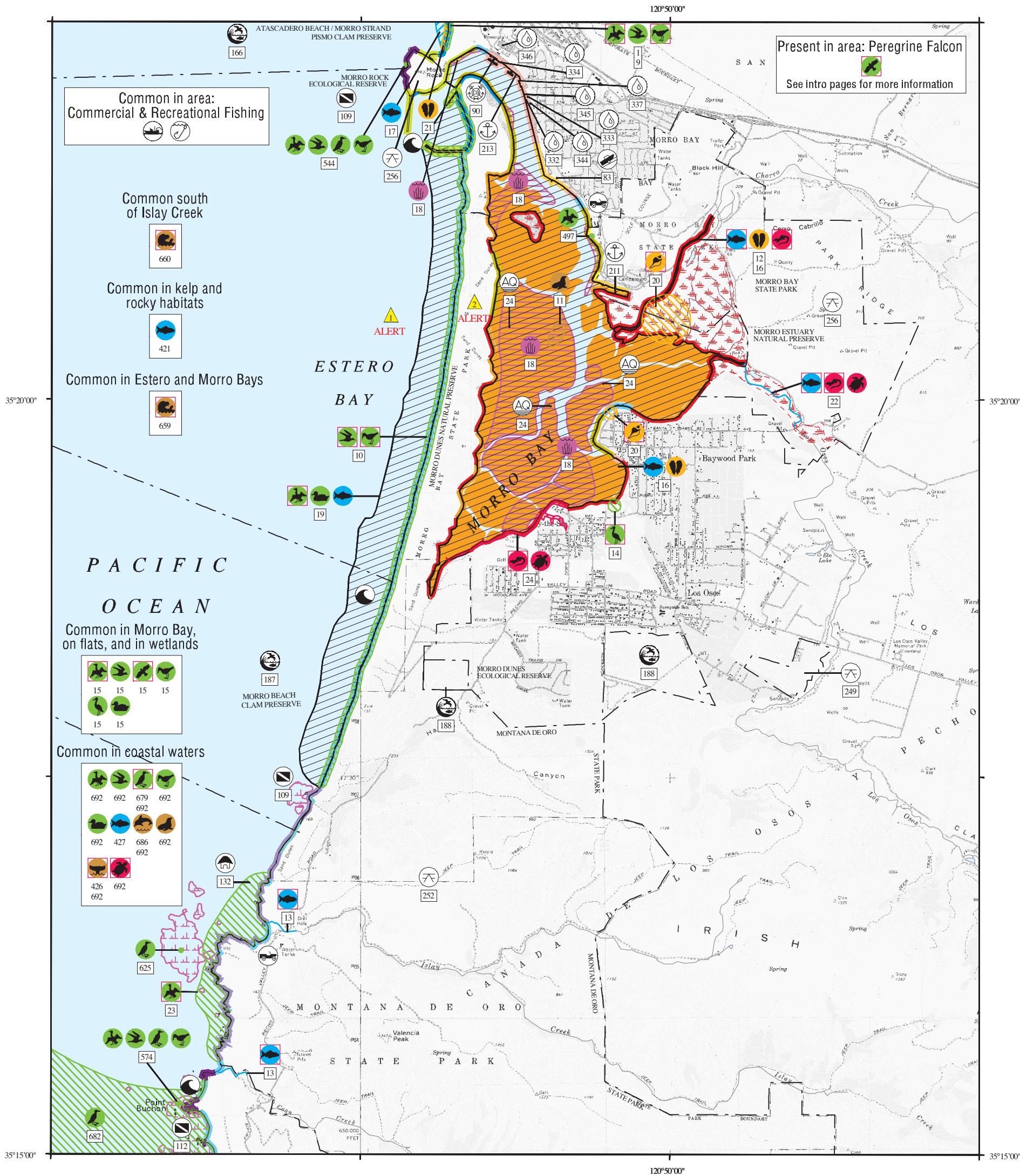
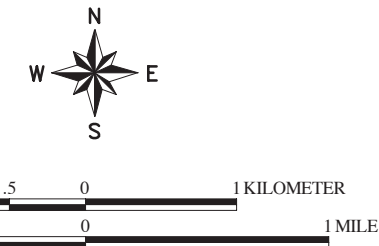


ENVIRONMENTAL SENSITIVITY INDEX MAP



- 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

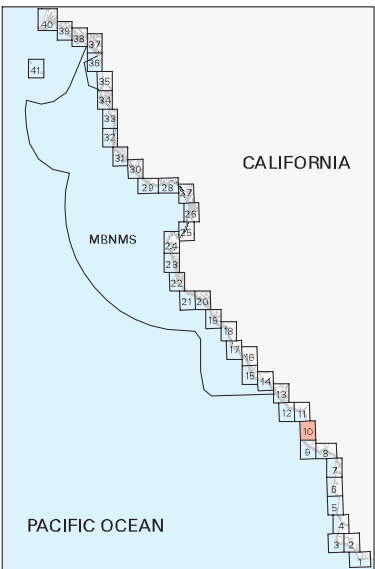


SCALE 1:50000

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California Department of Fish and Game



Central California: ESIMAP 10

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting
1	Western snowy plover	T	X X X X X X X X X X X X	MAR-SEP	-	-
9	Brown pelican	E E	X X X X X X X X X X X X	-	JUL-NOV	-
	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	-	-	-
10	California least tern	E E	X X X X X X X X X	MAY-AUG	-	-
	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	MAR-SEP	-	-
14	California black rail	T	X X X X X X X X X X X X	MAR-JUN	-	-
15	American white pelican		X X X X X X X X X X X X	-	-	-
	Brant	HIGH	X X X X X X X X X	-	FEB-JUN OCT-DEC	-
	Brown pelican	E E	X X X X X X X X X X X X	-	JUL-NOV	-
	California condor	E E	X X X X X X X X X X X X	-	-	-
	Dabbling ducks		X X X X X X X X X X	-	SEP-MAR	-
	Diving birds		X X X X X X X X X X X X	-	-	-
	Diving ducks		X X X X X X X X X X	-	SEP-MAY	-
	Loons		X X X X X X X X X	-	OCT-MAY	-
	Shorebirds	HIGH	X X X X X X X X X X X X	-	-	-
	Terns		X X X X X X X X X X	-	-	-
	Wading birds		X X X X X X X X X X X X	FEB-AUG	-	-
19	Brant	HIGH	X X X X X X X X X	-	FEB-JUN OCT-DEC	-
	Brown pelican	E E	X X X X X X X X X X X X	-	JUL-NOV	-
23	Brown pelican	E E	X X X X X X X X X X X X	-	JUL-NOV	-
497	Double-crested cormorant	331 INDIV.	X X X X X X X X X X X X	MAR-AUG	-	-
544	Black oystercatcher	2 INDIV.	X X X X X X X X X X X X	MAR-SEP	-	-
	Brandt's cormorant	117 INDIV.	X X X X X X X X X X X X	FEB-AUG	-	-
	Double-crested cormorant	24 INDIV.	X X X X X X X X X X X X	MAR-AUG	-	-
	Pelagic cormorant	53 INDIV.	X X X X X X X X X X X X	MAR-SEP	-	-
	Pigeon guillemot	24 INDIV.	X X X X X X X X X X X X	FEB-AUG	-	-
	Western gull	114 INDIV.	X X X X X X X X X X X X	MAR-AUG	-	-
574	Black oystercatcher	6 INDIV.	X X X X X X X X X X X X	MAR-SEP	-	-
	Pelagic cormorant	48 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	-	-
	Western gull	40 INDIV.	X X X X X X X X X X X X	MAR-AUG	-	-
625	Pigeon guillemot	56 INDIV.	X X X X X X X X X X X X	FEB-AUG	-	-
679	Sooty shearwater	HIGH	X X X X X X X X X	-	-	JUN-SEP
682	Sooty shearwater	MODERATE	X X X X X X X X X X	-	-	APR-OCT
692	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	-	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 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	-	OCT-APR	-
	Loons	LOW	X X 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	MODERATE	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	-	-	-
	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	-	-	-
	Surf scoter	MODERATE	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	-	MAR-APR SEP-NOV	-
	White-winged scoter	MODERATE	X X X X X X X X X X	-	MAR-APR OCT-NOV	-

FISH:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
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
13	Steelhead	T	X X X X X X X X X X X X	-	-	-	JUN-OCT	OCT-JUN
16	California halibut		X X X X X X X X X X X X	-	-	-	JAN-DEC	-
	Leopard shark		X X X X X X X X X X X X	MAR-JUN	-	-	JAN-DEC	-
	Nursery fish		X X X X X X X X X X X X	-	-	-	JAN-DEC	-
	Rockfish		X X X X X X X X X X X X	-	-	-	JAN-DEC	-
	Striped bass		X X X X X X X X X	-	-	-	MAY-SEP	MAY-SEP
	Surfperch		X X X X X X X X X X X X	APR-AUG	-	-	JAN-DEC	APR-NOV
17	Barred 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 X	MAR-AUG	MAR-SEP	-	-	MAR-AUG
	Striped bass		X X X X 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
19	Barred 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 X	MAR-AUG	MAR-SEP	-	-	MAR-AUG
	Striped bass		X X X X 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
22	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 X	-	-	-	-	APR-SEP

HABITAT:

RAR#	Species	S F Conc.	J F M A M J J A S O N D
18	Eelgrass	PATCHY-DENSE	X X X X X X X X 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
16	Clams		X X X X X X X X X X X X	-	-	-	-	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 10 (cont.)

BIOLOGICAL RESOURCES: (cont.)

INVERTEBRATE: (cont.)

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
20	Morro shoulderband	E	X X X X X X X X X X X X	-	-	-	-	JAN-DEC
21	Pismo clam	MODERATE	X X X X X X X X X X X X	JUN-DEC	-	-	-	JUN-DEC

MARINE MAMMAL:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting
11	Harbor seal	50-93 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 X X X X X	-	DEC-FEB	-	-
659	Sea otter	T 137 INDEP / 3 PUPS	X X X X X X X X X X X X	-	-	JAN-MAR SEP-NOV	-
660	Sea otter	T 247 INDEP / 36 PUPS	X X X X X X X X X X X X	-	-	JAN-MAR SEP-NOV	-
686	Harbor porpoise	1600 INDIV.	X X X X X X X X X X X X	JUL-SEP	JUN-AUG	-	-
692	Blue whale	E MODERATE	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	MODERATE	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	-	-	-	-
	Northern right-whale dolphin	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	-	-	-	-
	Risso's dolphin	MODERATE	X 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 X	-	-	-	-
	Seals	LOW	X X X X X X X X X X X X	-	-	-	-
	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	-	-	-	-

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 X X X X X	-	-	-	JUN-OCT	-
22	California red-legged frog	T	X X X X X X X X X X X X	NOV-APR	-	-	JAN-DEC	JAN-DEC
	Western pond turtle		X X X X X X X X X X	-	-	-	JUN-OCT	-
24	California red-legged frog	T	X X X X X X X X X X X X	NOV-APR	-	-	JAN-DEC	JAN-DEC
	Western pond turtle		X X X X X X X X X X	-	-	-	JUN-OCT	-
692	Leatherback sea turtle	E LOW	X X X X X X X X X X	-	-	-	-	MAY-NOV

HUMAN USE RESOURCES:

ALERT:

ID#	Description
1	Snowy plovers nesting, March-September.
2	Threatened/endangered or rare terrestrial plants potentially in the area.

AQUACULTURE:

HUN#	Name	Contact	Phone
24	WILLIAMS SHELLFISH FARMS		805/782-0502

BOAT RAMP:

HUN#	Name	Contact	Phone
83	MORRO BAY BOAT RAMP		

COAST GUARD:

HUN#	Name	Contact	Phone
90	UNITED STATES COAST GUARD STATION		

DIVING:

HUN#	Name	Contact	Phone
109	DIVING		
112	POINT BUCHON		

SAMPLING SITE:

HUN#	Name	Contact	Phone
132	PISCO:HAZARDS	PETE RAIMONDI	831/459-5674

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
166	ATASCADERO BEACH - SMCA	CDF&G	
187	MORRO BEACH - SMCA	CDF&G	
188	MORRO DUNES ER	CA DEPT OF FISH AND GAME	

MARINA:

HUN#	Name	Contact	Phone
211	MARINA		
213	MORRO BAY CITY HARBOR		

PARK:

HUN#	Name	Contact	Phone
249	LOS OSOS OAKS SR	CA DEPT OF PARKS AND RECREATION	
252	MONTANA DE ORO SP	CA DEPT OF PARKS AND RECREATION	
256	MORRO BAY SP	CA DEPT OF PARKS AND RECREATION	

WATER INTAKE:

HUN#	Name	Contact	Phone
332	BAY SHORES		
333	CENTRAL COAST SEAFOOD INC.		
334	CORDERO WINSTON CO.		
337	FINIKY FISH MARKET		
344	MORRO BAY AQUARIUM		
345	MORRO BAY CITY DESAL PLANT		
346	MORRO BAY POWERPLANT		

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