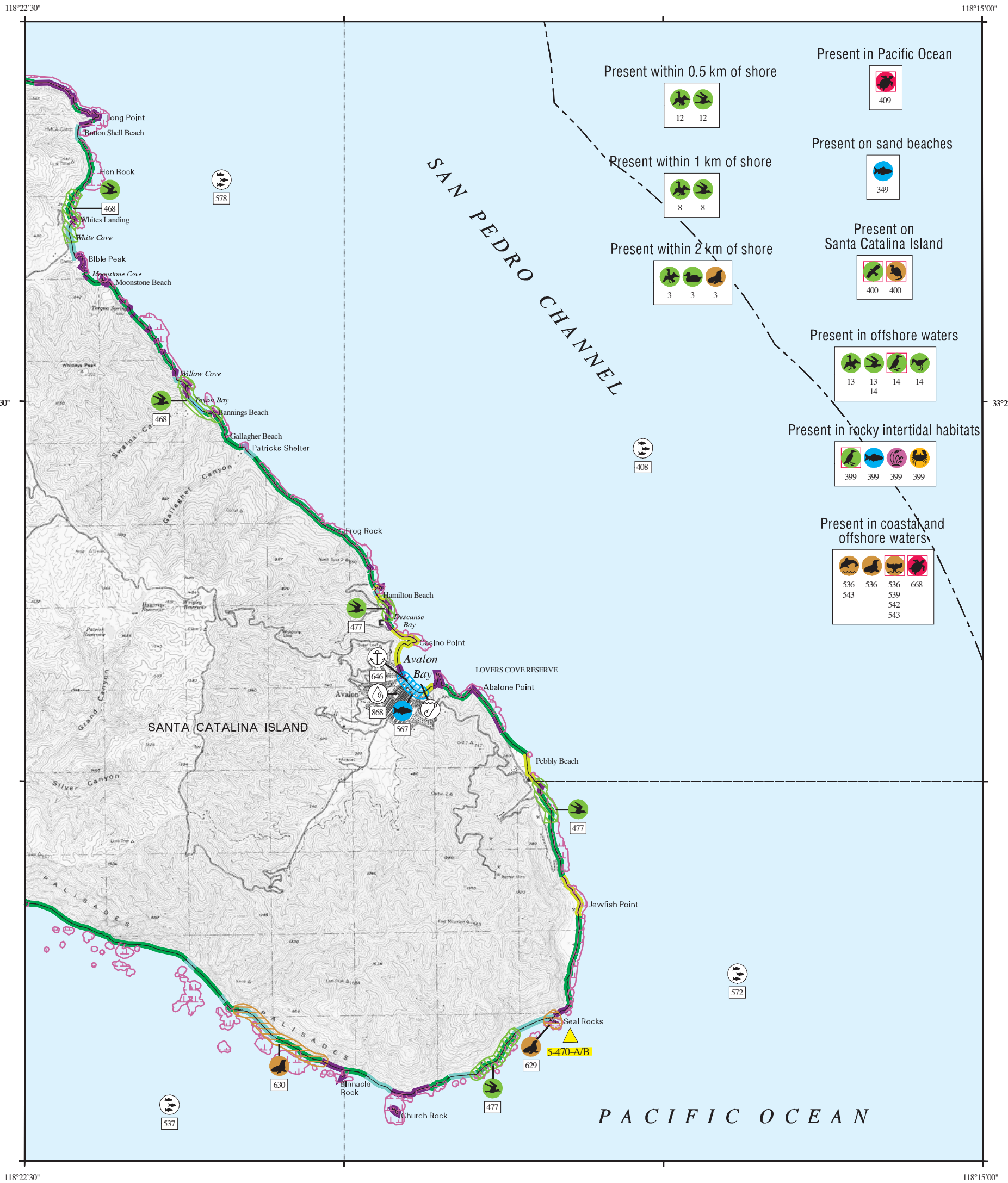


ENVIRONMENTAL SENSITIVITY INDEX MAP

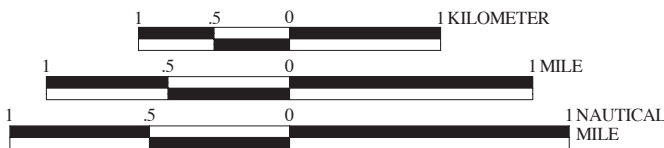


SHORELINE HABITATS (ESI)

- 1A EXPOSED ROCKY SHORES
- 1B EXPOSED, SOLID, MAN-MADE STRUCTURES
- 2A EXPOSED WAVE-CUT PLATFORMS IN BEDROCK
- 3A FINE- TO MEDIUM-GRAINED SAND BEACHES
- 3B SCARPS AND STEEP SLOPES IN SAND
- 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
- 9B VEGETATED LOW BANKS
- 9C HYPERSALINE TIDAL FLATS
- 10A SALT-AND BRACKISH-WATER MARSHES
- 10B FRESHWATER MARSHES
- 10C SWAMPS
- 10D SCRUB-SHRUB WETLANDS

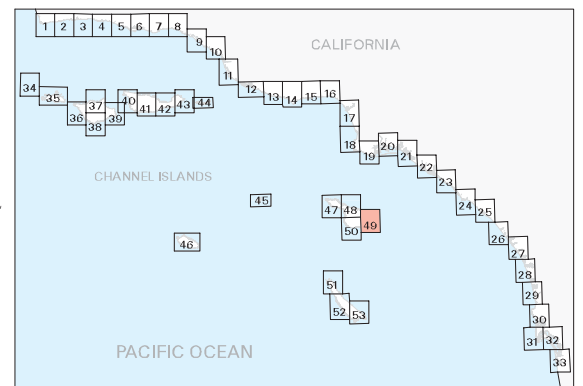


SCALE 1:50000



Not For Navigation
Published: January 2010

Published at Seattle, Washington
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Response and Restoration
Emergency Response Division



Southern California: ESIMAP 49

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
3	Surf scoter		X	X	X	X	X					X	X	X	-	-	-
	Western grebe		X	X	X	X	X					X	X	X	-	-	-
8	California gull		X	X	X	X						X	X	X	-	-	-
	Double-crested cormorant		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Heermann's gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
12	Common tern						X	X	X	X	X	X	X	X	-	-	-
	Elegant tern						X	X	X	X	X	X	X	X	-	-	-
	Pacific loon		X	X	X	X	X					X	X	X	-	-	-
13	Brandt's cormorant		X	X	X	X						X	X	X	-	-	-
	Brown pelican						X	X	X	X	X	X	X	X	-	-	-
	Western gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
14	Alcids						X	X	X	X					-	-	-
	Ashy storm-petrel	C	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Black-legged kittiwake		X	X	X	X							X	X	-	-	-
	Black-vented shearwater		X	X	X							X	X	X	-	-	-
	Bonaparte's gull		X	X	X	X						X	X	X	-	-	-
	Brown booby		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Cassin's auklet	C	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Common tern						X	X	X	X	X	X	X	X	-	-	-
	Jaegers		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Pink-footed shearwater						X	X	X	X					-	-	-
	Red phalarope						X	X		X	X	X	X		-	-	-
	Red-necked phalarope						X	X	X	X	X	X	X		-	-	-
	Rhinoceros auklet		X	X	X	X						X	X	X	-	-	-
	Sooty shearwater						X	X	X	X					-	-	-
	Xantus's murrelet	T	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JAN	-	-
399	Ashy storm-petrel	C	0-52				X	X	X	X	X	X	X	X	JAN-SEP	-	-
400	Bald eagle	E	6 PAIRS				X	X	X	X	X	X	X	X	FEB-JUN	-	-
	Osprey						X	X	X	X		X	X	X		-	-
	Peregrine falcon						X	X	X		X	X	X		-	-	-
468	Western gull		4				X	X	X	X	X	X	X	X	FEB-SEP	-	-
477	Western gull		2				X	X	X	X	X	X	X	X	FEB-SEP	-	-

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
349	California grunion	POSSIBLE RUNS	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	MAR-SEP	MAR-SEP	MAR-SEP	JAN-DEC
399	Rocky intertidal fish		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
567	California grunion	CONSISTENT RUNS	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	MAR-SEP	MAR-SEP	MAR-SEP	JAN-DEC

HABITAT:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
399	Rocky intertidal plants		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
399	Rocky intertidal invertebrates		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-

MARINE MAMMAL:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Pupping	Molting
3	Pacific harbor seal	PRIMARY	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
536	Bottlenose dolphin	PRIMARY	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	California sea lion	PRIMARY	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	AUG-SEP
	Dall's porpoise	PRIMARY	X	X	X	X							X		-	-	-	-
	Dall's porpoise	SECONDARY					X	X	X	X	X	X			-	-	-	-
	Killer whale	PRIMARY	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Minke whale	PRIMARY	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Northern right-whale dolphin	PRIMARY	X	X	X	X							X		-	-	-	-
	Northern right-whale dolphin	SECONDARY					X	X	X	X	X	X			-	-	-	-
	Pacific white-sided dolphin	PRIMARY	X	X	X	X							X		-	-	-	-
	Pacific white-sided dolphin	SECONDARY					X	X	X	X	X	X			-	-	-	-
	Risso's dolphin	PRIMARY	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Short-beaked common dolphin	PRIMARY	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Short-finned pilot whale	RARE	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Striped dolphin	RARE	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
539	Baird's beaked whale	SECONDARY	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Cuvier's beaked whale	SECONDARY	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Mesoplodont beaked whales	SECONDARY	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Sperm whale	E SECONDARY	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
542	Blue whale	E PRIMARY					X	X	X						-	-	-	-
	Blue whale	E RARE	X	X	X								X		-	-	-	-
	Blue whale	E SECONDARY				X			X	X	X	X			-	-	-	-
	Bryde's whale	RARE	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Fin whale	E RARE	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Humpback whale	E RARE	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	North Pacific right whale	E RARE	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
543	Gray whale	PRIMARY	X	X	X	X									-	-	-	-
	Gray whale	RARE					X	X	X	X	X				-	-	-	-
	Gray whale	SECONDARY					X					X	X		-	-	-	-
	Long-beaked common dolphin	PRIMARY	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
629	California sea lion	234 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	AUG-SEP
	Pacific harbor seal		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	MAY-JUL
630	Pacific harbor seal	28-50 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	MAY-JUL

REPTILE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Hatching	Internesting	Juveniles	Adults
409	Loggerhead sea turtle	T RARE	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
668	Leatherback sea turtle	E SECONDARY	X	X	X	X									-	-	-	-	MAR-JUL

TERRESTRIAL MAMMAL:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
400	Santa Catalina island fox	T E	X	X	X	X	X	X	X	X	X	X	X	X

HUMAN USE RESOURCES:

ACP SENSITIVE SITES:

ACP SITE#	Name	Contact
5-470-A/B	Seal Rocks - Catalina Island	CDF&G OSPR

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.

Southern California: ESIMAP 49 (cont.)

HUMAN USE RESOURCES: (cont.)

FISHERY AREA:

HUN#	Name	J	F	M	A	M	J	J	A	S	O	N	D
408	Barred sand bass	X	X	X	X	X	X	X	X	X	X	X	X
	California halibut	X	X	X	X	X	X	X	X	X	X	X	X
	California market squid	X	X	X	X	X	X	X	X	X	X	X	X
	California scorpionfish	X	X	X	X	X	X	X	X	X	X	X	X
	California sheephead		X	X	X	X	X	X	X	X	X	X	X
	California spiny lobster	X	X	X						X	X	X	X
	Dover sole	X	X	X	X	X	X	X	X	X	X	X	X
	Kelp bass	X	X	X	X	X	X	X	X	X	X	X	X
	Lingcod		X	X	X	X	X	X	X	X	X	X	X
	Northern anchovy	X	X	X	X	X	X	X	X	X	X	X	X
	Ocean whitefish		X	X	X	X	X	X	X	X	X	X	X
	Pacific chub mackerel	X	X	X	X	X	X	X	X	X	X	X	X
	Pacific sanddab	X	X	X	X	X	X	X	X	X	X	X	X
	Pacific sardine	X	X	X	X	X	X	X	X	X	X	X	X
	Ridgeback prawn	X	X	X	X					X	X	X	
	Rock crabs	X	X	X	X	X	X	X	X	X	X	X	X
	Rockfish		X	X	X	X	X	X	X	X	X	X	X
	Sablefish	X	X	X	X	X	X	X	X	X	X	X	X
	Sea cucumbers	X	X	X	X	X	X	X	X	X	X	X	X
	Sea urchins	X	X	X	X	X	X	X	X	X	X	X	X
	Shark	X	X	X	X	X	X	X	X	X	X	X	X
	Sheep crab	X	X	X	X	X	X	X	X	X	X	X	X
	Spot prawn		X	X	X	X	X	X	X	X	X	X	X
Surfperch	X	X	X	X	X	X	X	X	X	X	X	X	
Swordfish	X	X	X	X	X	X	X	X	X	X	X	X	
Thornyhead spp.	X	X	X	X	X	X	X	X	X	X	X	X	
Tuna	X	X	X	X	X	X	X	X	X	X	X	X	
Warty sea cucumber	X	X	X	X	X	X	X	X	X	X	X	X	
White seabass	X	X	X	X	X	X	X	X	X	X	X	X	
Yellowtail	X	X	X	X	X	X	X	X	X	X	X	X	
537	Barred sand bass	X	X	X	X	X	X	X	X	X	X	X	X
	Cabezon		X	X	X	X	X	X	X	X	X	X	X
	California halibut	X	X	X	X	X	X	X	X	X	X	X	X
	California market squid	X	X	X	X	X	X	X	X	X	X	X	X
	California scorpionfish	X	X	X	X	X	X	X	X	X	X	X	X
	California sheephead		X	X	X	X	X	X	X	X	X	X	X
	California spiny lobster	X	X	X						X	X	X	X
	Dover sole	X	X	X	X	X	X	X	X	X	X	X	X
	Kelp bass	X	X	X	X	X	X	X	X	X	X	X	X
	Lingcod		X	X	X	X	X	X	X	X	X	X	X
	Northern anchovy	X	X	X	X	X	X	X	X	X	X	X	X
	Ocean whitefish		X	X	X	X	X	X	X	X	X	X	X
	Pacific angel shark	X	X	X	X	X	X	X	X	X	X	X	X
	Pacific bonito	X	X	X	X	X	X	X	X	X	X	X	X
	Pacific chub mackerel	X	X	X	X	X	X	X	X	X	X	X	X
	Pacific sanddab	X	X	X	X	X	X	X	X	X	X	X	X
	Pacific sardine	X	X	X	X	X	X	X	X	X	X	X	X
	Rock crabs	X	X	X	X	X	X	X	X	X	X	X	X
	Rockfish		X	X	X	X	X	X	X	X	X	X	X
	Sablefish	X	X	X	X	X	X	X	X	X	X	X	X
	Sea cucumbers	X	X	X	X	X	X	X	X	X	X	X	X
	Sea urchins	X	X	X	X	X	X	X	X	X	X	X	X
	Shark	X	X	X	X	X	X	X	X	X	X	X	X
Sheep crab	X	X	X	X	X	X	X	X	X	X	X	X	
Spot prawn		X	X	X	X	X	X	X	X	X	X	X	
Surfperch	X	X	X	X	X	X	X	X	X	X	X	X	
Swordfish	X	X	X	X	X	X	X	X	X	X	X	X	
Thornyhead spp.	X	X	X	X	X	X	X	X	X	X	X	X	
Tuna	X	X	X	X	X	X	X	X	X	X	X	X	
Warty sea cucumber	X	X	X	X	X	X	X	X	X	X	X	X	
White seabass	X	X	X	X	X	X	X	X	X	X	X	X	
Yellowtail	X	X	X	X	X	X	X	X	X	X	X	X	
572	Barred sand bass	X	X	X	X	X	X	X	X	X	X	X	X
	California halibut	X	X	X	X	X	X	X	X	X	X	X	X
	California market squid	X	X	X	X	X	X	X	X	X	X	X	X
	California scorpionfish	X	X	X	X	X	X	X	X	X	X	X	X
	California sheephead		X	X	X	X	X	X	X	X	X	X	X
	California spiny lobster	X	X	X						X	X	X	X
	Dover sole	X	X	X	X	X	X	X	X	X	X	X	X
	Flatfish	X	X	X	X	X	X	X	X	X	X	X	X
	Kelp bass	X	X	X	X	X	X	X	X	X	X	X	X
	Lingcod		X	X	X	X	X	X	X	X	X	X	X
	Northern anchovy	X	X	X	X	X	X	X	X	X	X	X	X
	Ocean whitefish		X	X	X	X	X	X	X	X	X	X	X
	Pacific bonito	X	X	X	X	X	X	X	X	X	X	X	X
	Pacific chub mackerel	X	X	X	X	X	X	X	X	X	X	X	X
	Pacific sardine	X	X	X	X	X	X	X	X	X	X	X	X
	Rock crabs	X	X	X	X	X	X	X	X	X	X	X	X
	Rockfish		X	X	X	X	X	X	X	X	X	X	X
	Sablefish	X	X	X	X	X	X	X	X	X	X	X	X
	Sea cucumbers	X	X	X	X	X	X	X	X	X	X	X	X
	Sea urchins	X	X	X	X	X	X	X	X	X	X	X	X
	Shark	X	X	X	X	X	X	X	X	X	X	X	X
	Sheep crab	X	X	X	X	X	X	X	X	X	X	X	X
	Spot prawn		X	X	X	X	X	X	X	X	X	X	X
Surfperch	X	X	X	X	X	X	X	X	X	X	X	X	
Swordfish	X	X	X	X	X	X	X	X	X	X	X	X	
Thornyhead spp.	X	X	X	X	X	X	X	X	X	X	X	X	
Tuna	X	X	X	X	X	X	X	X	X	X	X	X	
White seabass	X	X	X	X	X	X	X	X	X	X	X	X	
Yellowtail	X	X	X	X	X	X	X	X	X	X	X	X	
578	Barred sand bass	X	X	X	X	X	X	X	X	X	X	X	X
	California halibut	X	X	X	X	X	X	X	X	X	X	X	X
	California market squid	X	X	X	X	X	X	X	X	X	X	X	X
	California scorpionfish	X	X	X	X	X	X	X	X	X	X	X	X
	California sheephead		X	X	X	X	X	X	X	X	X	X	X
	California spiny lobster	X	X	X						X	X	X	X
	Dover sole	X	X	X	X	X	X	X	X	X	X	X	X
	Kelp bass	X	X	X	X	X	X	X	X	X	X	X	X
	Lingcod		X	X	X	X	X	X	X	X	X	X	X
	Northern anchovy	X	X	X	X	X	X	X	X	X	X	X	X
	Ocean whitefish		X	X	X	X	X	X	X	X	X	X	X
	Pacific bonito	X	X	X	X	X	X	X	X	X	X	X	X
	Pacific chub mackerel	X	X	X	X	X	X	X	X	X	X	X	X
	Pacific sanddab	X	X	X	X	X	X	X	X	X	X	X	X
	Pacific sardine	X	X	X	X	X	X	X	X	X	X	X	X
	Rock crabs	X	X	X	X	X	X	X	X	X	X	X	X
	Rockfish		X	X	X	X	X	X	X	X	X	X	X
	Sablefish	X	X	X	X	X	X	X	X	X	X	X	X
	Sea cucumbers	X	X	X	X	X	X	X	X	X	X	X	X
	Sea urchins	X	X	X	X	X	X	X	X	X	X	X	X
	Shark	X	X	X	X	X	X	X	X	X	X	X	X
	Spot prawn		X	X	X	X	X	X	X	X	X	X	X
	Surfperch	X	X	X	X	X	X	X	X	X	X	X	X
Swordfish	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.

Southern California: ESIMAP 49 (cont.)

HUMAN USE RESOURCES: (cont.)

FISHERY AREA: (cont.)

HUN#	Name	J	F	M	A	M	J	J	A	S	O	N	D
578	Thornyhead spp.	X	X	X	X	X	X	X	X	X	X	X	X
	Tuna	X	X	X	X	X	X	X	X	X	X	X	X
	Warty sea cucumber	X	X	X	X	X	X	X	X	X	X	X	X
	White seabass	X	X	X	X	X	X	X	X	X	X	X	X
	Yellowtail	X	X	X	X	X	X	X	X	X	X	X	X

MARINA:

HUN#	Name	Contact	Phone
646	AVALON BAY	CITY OF AVALON	310/510-0535

WATER INTAKE:

HUN#	Name	Contact	Phone
868	AVALON DESAL PLANT		