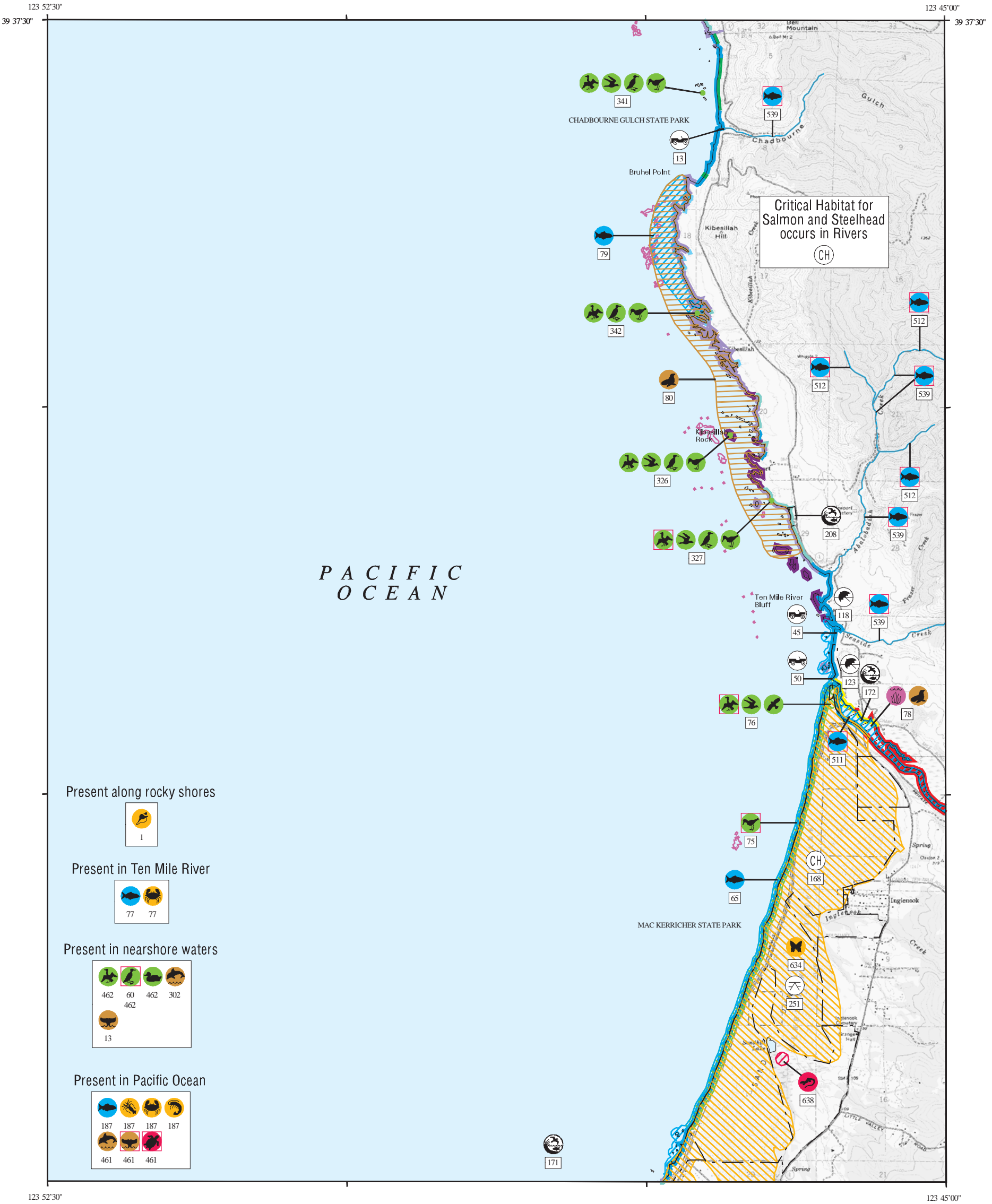
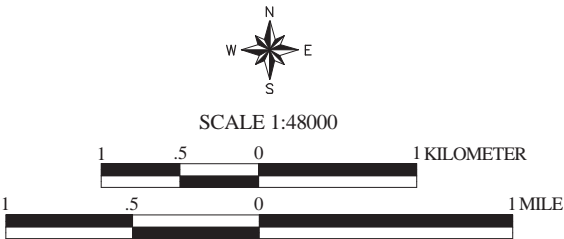


# ENVIRONMENTAL SENSITIVITY INDEX MAP



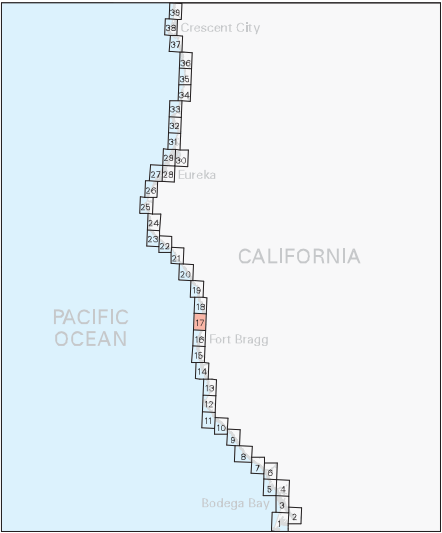
## SHORELINE HABITATS (ESI)

- 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
- 10A SALT- AND BRACKISH- WATER MARSHES
- 10B FRESHWATER MARSHES
- 10C SWAMPS
- 10D SCRUB- SHRUB WETLANDS



Not For Navigation  
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Emergency Response Division



Northern California: ESIMAP 17

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
60	Marbled murrelet	E T VERY LOW				X	X	X	X	X	X	X	X		-	-	-
75	Western snowy plover	T 7-42 BIRDS	X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-
76	Brandt's cormorant					X	X	X	X	X	X	X	X		-	-	-
	Brown pelican	E E				X	X	X	X	X	X	X	X		-	-	-
	California gull							X	X	X	X	X	X		-	-	-
	Caspian tern				X	X	X	X	X	X	X	X			-	-	-
	Double-crested cormorant		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Elegant tern					X	X	X	X	X	X	X			-	-	-
	Glaucous-winged gull		X	X	X	X				X	X	X	X		-	-	-
	Heermann's gull							X	X	X	X	X			-	-	-
	Osprey		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Pelagic cormorant		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Raptors		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Ring-billed gull		X	X	X	X			X	X	X	X	X		-	-	-
	Western gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
326	Black oystercatcher	1 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	APR-OCT	-	-
	Brandt's cormorant	100 INDIV.				X	X	X	X	X	X	X			MAR-AUG	-	-
	Common murre	516 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Pelagic cormorant	57 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-
	Pigeon guillemot	8 INDIV.				X	X	X	X	X	X				MAY-AUG	-	-
	Western gull	12 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
327	Black oystercatcher	1 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	APR-OCT	-	-
	Brandt's cormorant	47 INDIV.				X	X	X	X	X	X				MAR-AUG	-	-
	Brown pelican	E E 131 INDIV.				X	X	X	X	X	X	X			-	-	-
	Common murre	284 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Pelagic cormorant	57 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-
	Pigeon guillemot	42 INDIV.				X	X	X	X	X	X				MAY-AUG	-	-
	Western gull	26 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
341	Black oystercatcher	4 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	APR-OCT	-	-
	Pelagic cormorant	2 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-
	Pigeon guillemot	8 INDIV.				X	X	X	X	X	X				MAY-AUG	-	-
	Western gull	4 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
342	Black oystercatcher	1 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	APR-OCT	-	-
	Pelagic cormorant	55 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-
	Pigeon guillemot	8 INDIV.				X	X	X	X	X	X				MAY-AUG	-	-
462	Black scoter		X	X	X	X							X	X	-	-	-
	Brandt's cormorant					X	X	X	X	X	X	X			-	-	-
	Clark's grebe		X	X	X	X						X	X	X	-	-	-
	Common loon		X	X	X	X					X	X	X	X	-	-	-
	Common murre		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Double-crested cormorant		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Eared grebe		X	X	X	X					X	X	X	X	-	-	-
	Horned grebe		X	X	X	X						X	X	X	-	-	-
	Pacific loon					X	X	X					X	X	-	-	-
	Pelagic cormorant		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Red-throated loon		X	X	X	X						X	X		-	-	-
	Surf scoter		X	X	X	X				X	X	X	X		-	-	-
	Western grebe		X	X	X	X				X	X	X	X		-	-	-
	White-winged scoter		X	X	X	X					X	X	X		-	-	-

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
65	Night smelt		X	X	X	X	X	X	X	X					JAN-SEP	-	-	JAN-SEP	JAN-SEP
	Redtail surfperch		X	X	X	X	X	X	X	X	X	X	X	X	FEB-NOV	-	-	JAN-DEC	FEB-NOV
	Silver surfperch		X	X	X	X	X	X	X	X	X	X	X	X	SEP-OCT	-	JUN-AUG	JAN-DEC	JAN-DEC
	Striped surfperch		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-	JAN-DEC	JAN-DEC
	Surf smelt						X	X	X	X	X				MAY-OCT	-	-	MAY-OCT	MAY-OCT
	Walleye surfperch		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN NOV-DEC	-	-	APR-FEB	JAN-DEC
77	White seaperch		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-	JAN-DEC	JAN-DEC
	Bay pipefish		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Cabazon		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Coastrange sculpin		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Copper rockfish		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	English sole		X	X	X	X	X	X	X	X	X	X	X	X	-	-	FEB-JUN	JAN-DEC	-
	Kelp greenling		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	Night smelt		X	X	X	X	X	X	X	X					JAN-SEP	-	-	JAN-SEP	JAN-SEP
	Pacific herring		X	X	X	X	X	X	X					X	NOV-MAR	NOV-MAR	NOV-MAR	MAR-AUG	NOV-MAR
	Pacific lamprey		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	APR-JAN	JAN-DEC	JAN-DEC	JAN-DEC
	Pacific sanddab		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	Pacific sardine		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	Pacific staghorn sculpin		X	X	X	X	X	X	X	X	X	X	X	X	OCT-MAR	OCT-APR	OCT-APR	JAN-DEC	JAN-DEC
	Pacific tomcod		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Penpoint gunnel		X	X	X	X	X	X	X	X	X	X	X	X	JAN-MAR	-	-	JAN-DEC	JAN-DEC
	Prickly sculpin		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Redtail surfperch		X	X	X	X	X	X	X	X	X	X	X	X	FEB-NOV	-	-	JAN-DEC	FEB-NOV
	Saddleback gunnel		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Shiner surfperch					X	X	X	X	X	X	X			APR-NOV	-	-	APR-NOV	APR-NOV
	Silverspotted sculpin			X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Speckled sanddab			X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	Starry flounder			X	X	X	X	X	X	X	X	X	X	X	-	-	MAY-JUN	JAN-DEC	-
	Striped surfperch			X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-	JAN-DEC	JAN-DEC
	Threespine stickleback			X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	MAY-SEP	JUN-SEP	JUN-DEC	JAN-DEC
	Tidepool sculpin			X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Topsmelt						X	X	X	X	X	X	X		APR-JUN	APR-JUN	APR-JUL	MAR-OCT	MAR-OCT
	79	Gobies	HIGH	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
		Sculpin	HIGH	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	187	Bat ray					X	X	X	X	X	X	X		-	-	-	MAR-NOV	MAR-NOV
		Black rockfish		X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	-	JAN-MAY	JAN-DEC	JAN-DEC
		Black-and-yellow rockfish		X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	MAR-MAY	JAN-DEC	JAN-DEC
		Blue rockfish		X	X	X	X	X	X	X	X	X	X	X	NOV-MAR	-	-	JAN-DEC	JAN-DEC
Bocaccio			X	X	X	X	X	X	X	X	X	X	X	JAN-MAY	JAN-MAY	FEB-MAY	JAN-DEC	JAN-DEC	
Brown rockfish			X	X	X	X	X	X	X	X	X	X	X	DEC-JUL	-	-	JAN-DEC	JAN-DEC	
Brown smoothhound			X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-	JAN-DEC	JAN-DEC	
Cabazon			X	X	X	X	X	X	X	X	X	X	X	OCT-MAR	OCT-APR	OCT-APR	JAN-DEC	JAN-DEC	
California halibut			X	X	X	X	X	X	X	X	X	X	X	FEB-JUN	JAN-SEP	JAN-SEP	JAN-DEC	FEB-OCT	
California skate			X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC	
Canary rockfish (orange)			X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-MAR	DEC-APR	JAN-DEC	JAN-DEC	
Chilipepper			X	X	X	X	X	X	X	X	X	X	X	NOV-JUN	NOV-JUN	JAN-JUN	JAN-DEC	JAN-DEC	
China rockfish			X	X	X	X	X	X	X	X	X	X	X	JAN-JUL	-	-	JAN-DEC	JAN-DEC	
Chinook salmon			X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
Coho salmon			X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
Copper rockfish			X	X	X	X	X	X	X	X	X	X	X	X	FEB-APR	FEB-APR	FEB-APR	JAN-DEC	JAN-DEC
English sole			X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
Grass rockfish			X	X	X	X	X	X	X	X	X	X	X	X	DEC-FEB	DEC-MAR	JAN-JUN	JAN-DEC	JAN-DEC
Gray smoothhound											X	X	X		-	-	-	-	JUN-SEP
Green sturgeon				X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
Jacksmelt				X	X	X	X	X	X	X	X	X	X	X	JAN-AUG	JAN-AUG	JAN-DEC	JAN-DEC	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.

Northern California: ESIMAP 17 (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
187	Kelp greenling		X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	-	-	JAN-DEC	JAN-DEC
	Leopard shark		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-	JAN-DEC	OCT-JUN
	Lingcod		X	X	X	X	X	X	X	X	X	X	X	X	NOV-APR	DEC-FEB	FEB-APR	JAN-DEC	JAN-DEC
	Longnose skate		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Monkeyface prickleback		X	X	X	X	X	X	X	X	X	X	X	X	JAN-APR	-	-	JAN-DEC	JAN-DEC
	Northern anchovy							X	X	X	X	X	X		-	-	JUN-SEP	JUN-NOV	JUN-OCT
	Pacific herring		X	X	X	X	X	X	X	X			X	X	NOV-MAR	NOV-MAR	NOV-MAR	MAR-AUG	NOV-MAR
	Pacific sanddab		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	-	-	JAN-DEC	JAN-DEC
	Pacific sardine							X	X	X					-	-	-	-	JUN-AUG
	Quillback rockfish		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-	JAN-DEC	JAN-DEC
	Rock greenling		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Sand sole		X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUL	-	-	JAN-DEC	JAN-DEC
	Sandpaper skate		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Sevengill shark			X	X	X	X	X	X	X	X	X			-	-	-	-	MAR-NOV
	Sixgill shark		X	X	X	X	X	X	X	X	X	X	X	X	JUN-SEP	-	-	JAN-DEC	JAN-DEC
	Speckled sanddab		X	X	X	X	X	X	X	X	X	X	X	X	MAR-OCT	-	AUG-DEC	JAN-DEC	JAN-DEC
	Spiny dogfish		X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	-	-	JAN-DEC	JAN-DEC
	Starry flounder		X	X	X	X	X	X	X	X	X	X	X	X	NOV-FEB	-	-	JAN-DEC	JAN-DEC
	Steelhead		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Striped surfperch		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-	JAN-DEC	JAN-DEC
	Topsmelt		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	APR-JUL	MAY-AUG	JAN-DEC	JAN-DEC
	Vermilion rockfish		X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	-	-	JAN-DEC	JAN-DEC
	Yellowtail rockfish		X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUL	JAN-JUL	JAN-JUL	JAN-DEC	JAN-DEC
511	Chinook salmon	T	X						X	X	X	X	X		OCT-JAN	-	-	-	AUG-JAN
	Coho salmon	E E	X	X	X	X	X	X	X	X	X	X	X	X	OCT-FEB	NOV-APR	FEB-JUN	JAN-DEC	SEP-JAN
	Steelhead	T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	OCT-JUN
	Tidewater goby	E	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	-	-	-	JAN-DEC
512	Steelhead	T	X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAY	DEC-JUN	DEC-JUL	JAN-DEC	OCT-JUN
539	Steelhead	T	X	X	X	X	X				X	X	X		-	-	-	-	OCT-JUN

HABITAT:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
78	Eelgrass		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
1	Red abalone		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	APR-JUL	APR-JUL	JAN-DEC	JAN-DEC
77	Dungeness crab		X	X	X	X	X	X	X	X	X	X	X	X	-	-	APR-JUN	JAN-DEC	-
187	California market squid		X	X	X	X	X	X	X	X	X	X	X	X	APR-NOV	APR-NOV	APR-JAN	JAN-DEC	JAN-DEC
	Dungeness crab		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	MAR-SEP	JUN-SEP	JAN-DEC
	Ocean pink shrimp		X	X	X	X	X	X	X	X	X	X	X	X	SEP-OCT	OCT-APR	MAR-JUL	JAN-DEC	JAN-DEC
	Spot prawn		X	X	X	X	X	X	X	X	X	X	X	X	SEP-APR	SEP-APR	SEP-APR	JAN-DEC	JAN-DEC
634	Globose dune beetle		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	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
13	Gray whale		X	X	X	X	X	X	X	X	X	X	X	X	-	DEC-FEB	-	-
78	Harbor seal		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
80	Harbor seal	185-407 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
302	Harbor porpoise	MODERATE	X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	JUN-AUG	-	-
461	Blue whale	E LOW						X	X	X	X	X	X		-	-	-	-
	Humpback whale	E MODERATE						X	X	X	X	X			-	-	-	-
	Killer whale	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	-	-	-	-
	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	-	-	-	-
	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	Internesting	Juveniles	Adults
461	Leatherback sea turtle	E VERY LOW						X	X	X	X	X	X		-	-	-	-	MAY-NOV
638	Northern red-legged frog		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-	-	-

HUMAN USE RESOURCES:

ACCESS:

HUN#	Name	Contact	Phone
13	CHADBOURNE GULCH	CDFG	
45	SEASIDE CREEK BEACH	CDFG	
50	TEN MILE RIVER BEACH AREA	CDFG	

BEACH:

HUN#	Name	Contact	Phone
118	SEASIDE CREEK BEACH	CDFG	
123	TEN MILE RIVER BEACH AREA	CDFG	

CRITICAL HABITAT:

HUN#	Name	Contact	Phone
168	WESTERN SNOWY PLOVER CRITICAL HABITAT	USFWS	707/822-7201

ESSENTIAL HABITAT:

HUN#	Name	Contact	Phone
171	ESSENTIAL FISH HABITAT HAPC - ROCKY REEF	PACIFIC STATES MARINE FISHERIES COMMISSION	
172	ESSENTIAL FISH HABITAT HAPC - SEAGRASS	PACIFIC STATES MARINE FISHERIES COMMISSION	

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
208	SOUTH KIBESILLAH GULCH FA	CDFG	

PARK:

HUN#	Name	Contact	Phone
251	MACKERRICHER SP	CDPR	707/964-9112