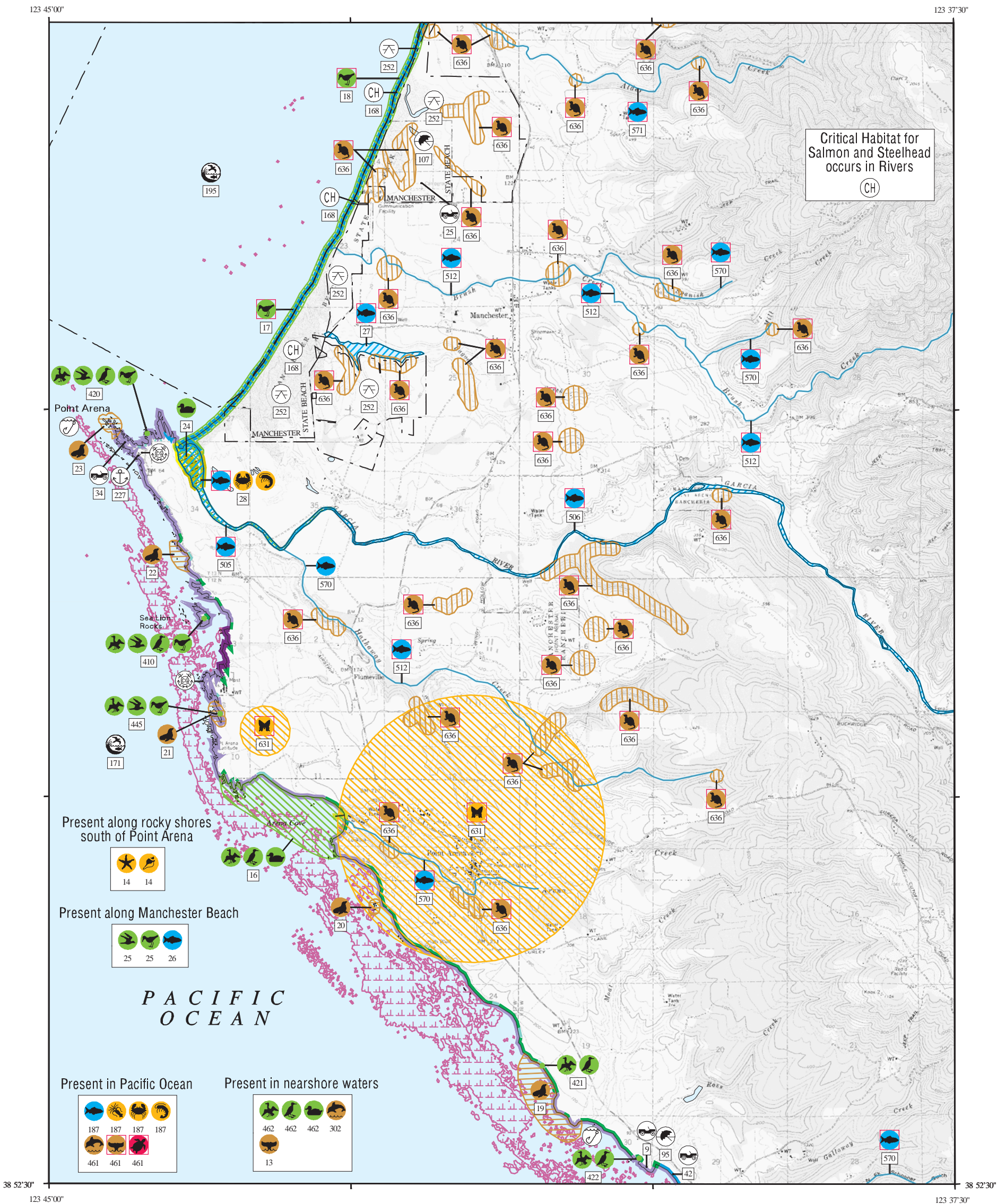


ENVIRONMENTAL SENSITIVITY INDEX MAP



Northern California: ESIMAP 12

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
16	Grebes	HIGH	X	X	X	X	X				X	X	X	X	-	-	-
	Laysan albatross	1 BIRD	X	X	X	X							X	X	-	-	-
	Scoters	HIGH	X	X	X	X					X	X	X	X	-	-	-
17	Western snowy plover	T 2 BIRDS			X	X	X	X	X	X	X				MAR-SEP	-	-
18	Western snowy plover	T 12-24 BIRDS	X	X	X	X			X	X	X	X	X	X	-	-	-
24	Tundra swan		X	X										X	-	-	-
	Waterfowl		X	X	X	X							X	X	X	-	-
25	Caspian tern				X	X	X	X	X	X	X	X			-	-	-
	Shorebirds		X	X	X	X			X	X	X	X	X	X	-	MAR-APR JUL-OCT	-
410	Black oystercatcher	4 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	APR-OCT	-	-
	Pelagic cormorant	106 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-
	Pigeon guillemot	12 INDIV.				X	X	X	X	X	X	X			MAY-AUG	-	-
	Western gull	9 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
420	Black oystercatcher	7 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	APR-OCT	-	-
	Pelagic cormorant	154 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-
	Pigeon guillemot	52 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	-	-
421	Pelagic cormorant	40 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-
	Pigeon guillemot	10 INDIV.				X	X	X	X	X	X				MAY-AUG	-	-
422	Pelagic cormorant	42 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	-	-
445	Black oystercatcher	4 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	APR-OCT	-	-
	Pelagic cormorant	183 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-
	Western gull	16 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
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	-	-
	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	X	-	-	-
	Surf scoter		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
26	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		FEB-NOV	-	-	FEB-NOV	FEB-NOV
	Surf smelt		X	X	X	X	X	X	X	X	X	X	X	X	JUN-SEP	JUN-OCT	-	JAN-DEC	JAN-DEC
27	Tidewater goby	E	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	-	-	-	JAN-DEC
28	Bay pipefish		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Buffalo sculpin		X	X	X	X	X	X	X	X	X	X	X	X	JAN-MAY	-	-	JAN-DEC	JAN-DEC
	Cabazon		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	California roach		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	-
	Green sturgeon	T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Jacksmelt					X	X	X	X	X	X				APR-JUN	APR-JUN	APR-AUG	APR-OCT	APR-OCT
	Kelp greenling		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	Longfin smelt		X	X	X	X	X	X	X	X	X	X	X	X	NOV-JAN	NOV-JAN	NOV-FEB	JAN-DEC	OCT-APR
	Night smelt		X	X	X	X	X	X	X	X					JAN-SEP	-	-	JAN-SEP	JAN-SEP
	Pacific halibut		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	Pacific herring						X	X	X	X	X	X	X	X	JUN-SEP	JUN-SEP	JUN-SEP	SEP-DEC	JUN-SEP
	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 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	DEC-FEB	DEC-FEB	SEP-MAR	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
	Pile surfperch		X	X	X	X	X	X	X	X	X	X	X	X	APR-SEP	-	-	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	X	X	MAY-JUL	-	-	MAY-DEC	APR-OCT
	Silver surfperch		X	X	X	X	X	X	X	X	X	X	X	X	SEP-OCT	-	JUN-AUG	JAN-DEC	JAN-DEC
	Silverspotted sculpin		X	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	X	-	-	-	JAN-DEC	-
	Starry flounder		X	X	X	X	X	X	X	X	X	X	X	X	-	-	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	X	X	X	X	X	X	X	JUN-SEP	JUN-OCT	-	JAN-DEC	JAN-DEC
	Threespine stickleback		X	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	X	-	-	-	JAN-DEC	JAN-DEC
	Topsmelt					X	X	X	X	X	X				APR-JUN	APR-JUN	APR-JUL	MAR-OCT	MAR-OCT
	Walleye surfperch		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN NOV-DEC	-	-	APR-FEB	JAN-DEC
	White seaperch		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-	JAN-DEC	JAN-DEC
	Yellowtail rockfish		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	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	X	SEP-NOV	-	JAN-MAY	JAN-DEC	JAN-DEC
	Black-and-yellow rockfish		X	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	X	NOV-MAR	-	-	JAN-DEC	JAN-DEC
	Bocaccio		X	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	X	DEC-JUL	-	-	JAN-DEC	JAN-DEC
	Brown smoothhound		X	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	X	OCT-MAR	OCT-APR	OCT-APR	JAN-DEC	JAN-DEC
	California halibut		X	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	X	-	-	-	JAN-DEC	JAN-DEC
	Canary rockfish (orange)		X	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	X	NOV-JUN	NOV-JUN	JAN-JUN	JAN-DEC	JAN-DEC
	China rockfish		X	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	X						-	-	-	-	JUN-SEP
	Green sturgeon		X	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	X	JAN-AUG	JAN-AUG	JAN-DEC	JAN-DEC	JAN-DEC
	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

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 12 (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	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
505	Chinook salmon	T	X	X							X	X	X		-	-	-	-	OCT-FEB
	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
506	Chinook salmon	T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-SEP	OCT-FEB
	Coho salmon	E E	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	SEP-JAN
	Steelhead	T	X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAY	DEC-JUN	DEC-JUL	JAN-DEC	OCT-JUN
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
570	Steelhead	T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	OCT-JUN
571	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	DEC-MAY	DEC-JUN	DEC-JUL	JAN-DEC	OCT-JUN

INVERTEBRATE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
14	Red abalone		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	APR-JUL	APR-JUL	JAN-DEC	JAN-DEC
	Sea urchins		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
28	California bay shrimp		X	X	X	X	X	X	X	X	X	X	X	X	DEC-AUG	DEC-AUG	DEC-SEP	JAN-DEC	JAN-DEC
	Dungeness crab		X	X	X	X	X	X	X	X	X	X	X	X	-	-	MAR-JUN	JAN-DEC	JAN-DEC
	Yellow shore crab		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	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
631	Behren's silverspot butterfly	E	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	-	-
19	Harbor seal	87 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
20	Harbor seal	9 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
21	Harbor seal	4 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
22	Harbor seal	8-127 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
23	Harbor seal	77-78 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	Interesting	Juveniles	Adults
461	Leatherback sea turtle	E VERY LOW						X	X	X	X	X	X		-	-	-	-	MAY-NOV

TERRESTRIAL MAMMAL:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
636	Point Arena mountain beaver	E	X	X	X	X	X	X	X	X	X	X	X	X

HUMAN USE RESOURCES:

ACCESS:

HUN#	Name	Contact	Phone
9	BOWLING BALL BEACH	CDFG	
25	MANCHESTER STATE BEACH	CSP	707/882-2463
34	POINT ARENA LIGHT HOUSE	CDFG	
42	SAUNDER REEF	CDFG	

BEACH:

HUN#	Name	Contact	Phone
95	BOWLING BALL BEACH	CDFG	
107	MANCHESTER STATE BEACH	CSP	707/882-2463

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	

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
195	MANCHESTER AND ARENA ROCK SMCA	CDFG	

MARINA:

HUN#	Name	Contact	Phone
227	POINT ARENA HARBOR	CDFG	

PARK:

HUN#	Name	Contact	Phone
252	MANCHESTER SP	CDPR	707/882-2463

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.