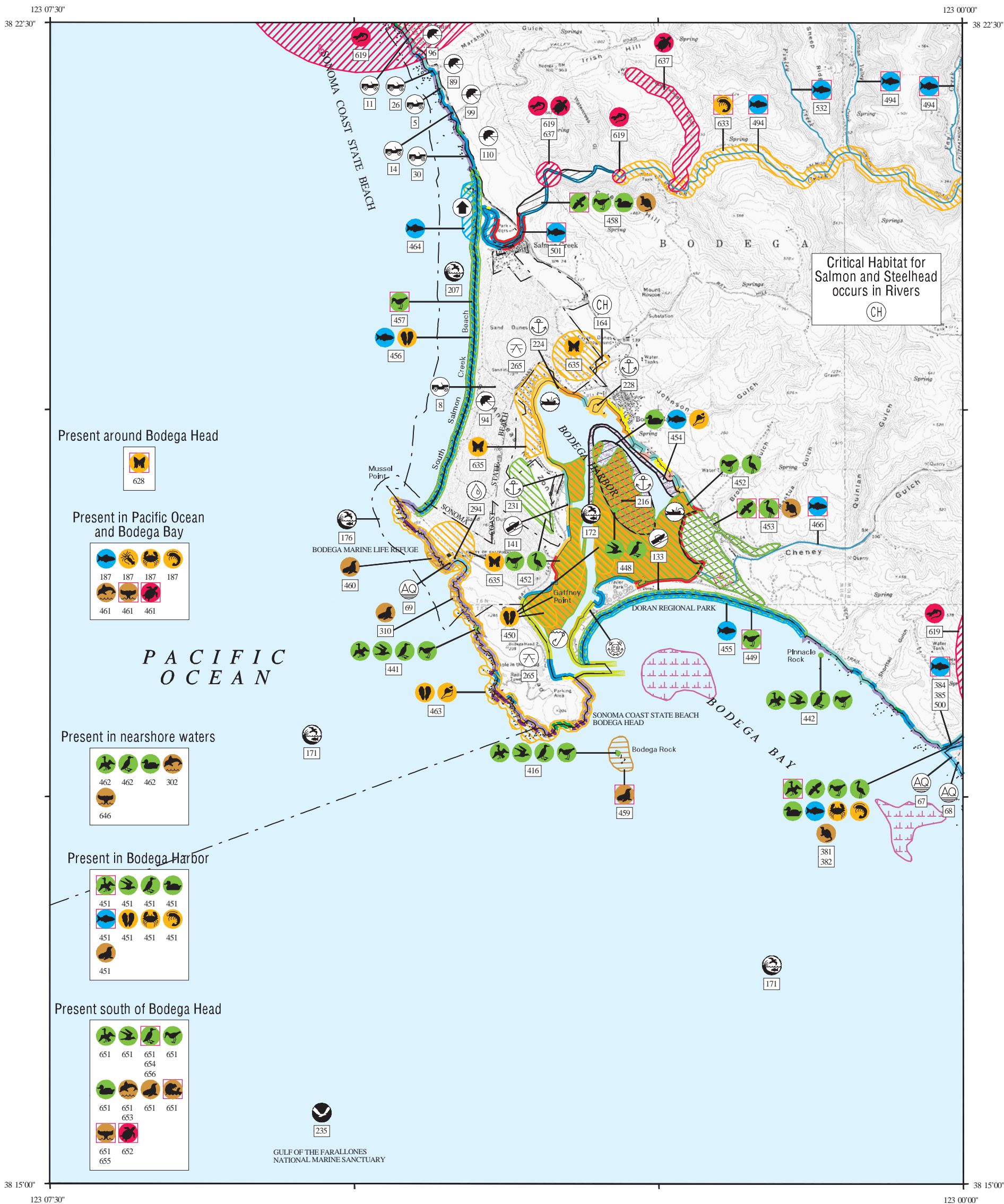


ENVIRONMENTAL SENSITIVITY INDEX MAP

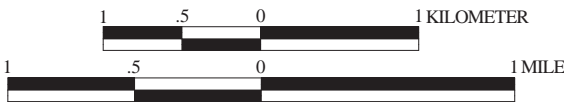


SHORELINE HABITATS (ESI)

- 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

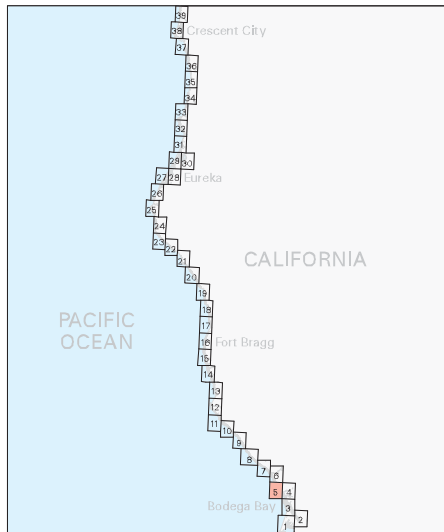


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Northern California: ESIMAP 5

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
381	American avocet		X	X	X	X	X			X	X	X	X	X	-	-	-
	American white pelican		X	X						X	X	X	X	X	-	-	-
	American wigeon		X	X	X	X					X	X	X		-	-	-
	Cinnamon teal		X	X	X					X	X	X	X	X	-	-	-
	Double-crested cormorant		X	X					X	X	X	X	X	X	-	-	-
	Dunlin	HIGH	X	X	X	X	X				X	X	X		-	-	-
	Great blue heron		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Great egret		X	X	X					X	X	X	X	X	-	-	-
	Greater yellowlegs		X	X	X	X	X			X	X	X	X	X	-	-	-
	Green-winged teal		X	X	X	X				X	X	X	X		-	-	-
	Killdeer		X	X	X	X				X	X	X	X		-	-	-
	Least sandpiper	HIGH	X	X	X	X				X	X	X	X	X	-	-	-
	Long-billed curlew		X	X	X	X			X	X	X	X	X	X	-	-	-
	Mallard		X	X	X						X	X	X		-	-	-
	Marbled godwit		X	X	X	X	X		X	X	X	X	X	X	-	-	-
	Northern harrier		X	X	X	X	X			X	X	X	X		-	-	-
	Sanderling		X	X	X	X	X			X	X	X	X	X	-	-	-
	Semipalmated plover				X	X	X		X	X	X	X	X		-	-	-
	Short-billed dowitcher				X	X		X	X						-	-	-
	Snowy egret		X	X	X	X			X	X	X	X	X	X	-	-	-
	Tundra swan		X	X									X		-	-	-
	Western sandpiper	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Whimbrel			X	X	X			X	X	X				-	-	-
	Willet	HIGH	X	X	X	X			X	X	X	X	X	X	-	-	-
382	Brown pelican	E E			X	X	X	X	X	X	X	X	X		-	-	-
	Bufflehead	HIGH	X	X	X	X					X	X			-	-	-
	Common goldeneye		X	X	X	X					X	X	X		-	-	-
	Greater scaup		X	X	X	X					X	X	X		-	-	-
	Ruddy duck		X	X	X	X					X	X	X		-	-	-
	Surf scoter		X	X	X	X				X	X	X	X		-	-	-
416	Black oystercatcher	2 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	APR-OCT	-	-
	Brandt's cormorant	361 NESTS		X	X	X	X	X	X	X	X				MAR-AUG	-	-
	Pigeon guillemot	30 INDIV.		X	X	X	X	X	X	X					MAY-AUG	-	-
	Rhinoceros auklet	2 INDIV.			X	X	X	X	X	X	X				APR-AUG	-	-
	Western gull	24 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
441	Black oystercatcher	6 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	APR-OCT	-	-
	Pelagic cormorant	103 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-
	Pigeon guillemot	2 INDIV.			X	X	X	X	X	X	X				MAY-AUG	-	-
	Western gull	10 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
442	Black oystercatcher	2 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	APR-OCT	-	-
	Pelagic cormorant	51 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-
	Pigeon guillemot	27 INDIV.			X	X	X	X	X	X	X				MAY-AUG	-	-
	Rhinoceros auklet	2 INDIV.			X	X	X	X	X	X	X				APR-AUG	-	-
	Western gull	2 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
448	Pigeon guillemot	2 INDIV.			X	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	-	-
449	Western snowy plover	T 15-35 BIRDS	X	X	X	X		X	X	X	X	X	X		-	-	-
451	American coot		X	X	X	X				X	X	X	X		-	-	-
	American white pelican		X	X						X	X	X	X	X	-	-	-
	American wigeon		X	X	X	X				X	X	X			-	-	-
	Brandt's cormorant				X	X	X	X	X	X	X	X	X		-	-	-
	Brown pelican	E E								X	X	X	X	X	-	-	-
	Bufflehead		X	X	X	X					X	X			-	-	-
	California gull							X	X	X	X	X	X	X	-	-	-
	Caspian tern			X	X	X	X	X	X	X	X				-	-	-
	Common goldeneye		X	X	X	X					X	X	X		-	-	-
	Common loon		X	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		-	-	-
	Elegant tern				X	X	X	X	X	X	X	X			-	-	-
	Forster's tern			X	X	X	X	X	X	X	X	X			-	-	-
	Glaucous-winged gull		X	X	X	X	X			X	X	X	X		-	-	-
	Greater scaup		X	X	X	X				X	X	X			-	-	-
	Heermann's gull					X	X	X	X	X	X				-	-	-
	Horned grebe		X	X	X	X				X	X	X			-	-	-
	Mallard		X	X	X						X	X	X		-	-	-
	Mew gull		X	X	X	X				X	X	X			-	-	-
	Northern pintail		X	X	X	X	X		X	X	X	X	X	X	-	-	-
	Northern shoveler		X	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-breasted merganser		X	X	X	X	X				X	X			-	-	-
	Ring-billed gull		X	X	X	X	X		X	X	X	X	X		-	-	-
	Ruddy duck		X	X	X	X				X	X	X			-	-	-
	Sooty shearwater				X	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	X		-	-	-
	Western gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
452	American avocet		X	X	X	X	X			X	X	X	X	X	-	-	-
	Black turnstone		X	X	X	X	X		X	X	X	X	X	X	-	-	-
	Black-bellied plover		X	X	X	X	X		X	X	X	X	X		-	-	-
	Black-crowned night-heron		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Dunlin		X	X	X	X	X			X	X	X			-	-	-
	Great blue heron		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Great egret		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Least sandpiper		X	X	X	X				X	X	X	X	X	-	-	-
	Marbled godwit		X	X	X	X	X		X	X	X	X	X	X	-	-	-
	Sanderling		X	X	X	X	X		X	X	X	X	X	X	-	-	-
	Semipalmated plover				X	X	X		X	X	X	X			-	-	-
	Short-billed dowitcher				X	X		X	X						-	-	-
	Snowy egret		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Surfbird		X	X	X	X	X		X	X	X	X	X	X	-	-	-
	Western sandpiper		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Willet		X	X	X	X			X	X	X	X	X	X	-	-	-
453	American kestrel		X	X	X					X	X	X			-	-	-
	American peregrine falcon	E	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Bald eagle	E	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	California black rail	T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Northern harrier		X	X	X	X	X		X	X	X	X			-	-	-
	Red-tailed hawk		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
454	Brant		X	X	X	X				X	X	X			-	-	-
457	Western snowy plover	T 5-18 BIRDS	X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-
458	American peregrine falcon	E	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Shorebirds		X	X	X	X		X	X	X	X	X	X		-	MAR-APR JUL-OCT	-
	Waterfowl		X	X	X	X				X	X	X			-	-	-
462	Black scoter		X	X	X	X				X	X				-	-	-
	Brandt's cormorant				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.

Northern California: ESIMAP 5 (cont.)

BIOLOGICAL RESOURCES: (cont.)

BIRD: (cont.)

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
462	Clark's grebe		X	X	X	X						X	X	X	-	-	-
	Common loon		X	X	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	X		-	-	-
	Surf scoter		X	X	X	X				X	X	X	X		-	-	-
	Western grebe		X	X	X	X	X			X	X	X	X		-	-	-
	White-winged scoter		X	X	X	X				X	X	X	X		-	-	-
651	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	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	-
654	Marbled murrelet	E T MODERATE	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
656	Sooty shearwater	MODERATE		X	X	X	X	X	X	X	X	X	X		-	-	APR-OCT

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
187	Bat ray				X	X	X	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
	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			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			-	-	-	-	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
382	Arrow goby		X	X	X	X	X	X	X	X	X	X	X	X	JAN-AUG	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	English sole		X	X	X	X	X	X	X	X	X	X	X	X	-	-	DEC-MAY	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
	Northern anchovy		X	X	X	X	X	X	X	X	X	X	X	X	-	-	JAN-DEC	JAN-DEC	JAN-DEC
	Pacific sanddab		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	-	-	JAN-DEC	JUL-SEP
	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
	Shiner surfperch				X	X	X	X	X	X	X				APR-NOV	-	-	APR-NOV	APR-NOV
	Starry flounder		X	X	X	X	X	X	X	X	X	X	X	X	-	-	FEB-NOV	JAN-DEC	JAN-DEC
	Striped bass				X	X	X	X	X						-	-	-	-	MAY-SEP
	Surf smelt		X	X	X	X	X	X	X	X	X	X	X	X	-	-	DEC-APR	JAN-DEC	JAN-DEC
	Threespine stickleback		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	MAR-JUN	MAR-AUG	JUN-MAR	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
384	Pacific herring		X	X	X	X	X	X	X		X	X			NOV-MAR	NOV-MAR	NOV-MAR	MAR-AUG	NOV-MAR
385	Tidewater goby	E	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	-	-	-	JAN-DEC
451	Arrow goby		X	X	X	X	X	X	X	X	X	X	X	X	AUG-OCT	AUG-OCT	AUG-DEC	JAN-DEC	JAN-DEC
	Bay goby		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	NOV-MAR	-	-	JAN-DEC	JAN-DEC
	California halibut		X	X	X	X	X	X	X	X	X	X	X	X	-	-	OCT-APR	JAN-DEC	-
	English sole		X	X	X	X	X	X	X	X	X	X	X	X	-	-	DEC-MAY	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	DEC-MAR	-	-	JAN-DEC	JAN-DEC
	Lingcod				X	X	X	X	X						-	-	FEB-MAR	APR-AUG	-
	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 sand lance		X	X	X	X	X	X	X	X	X	X	X	X	-	-	JAN-APR	JAN-DEC	JAN-DEC
	Pacific sanddab		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	-	-	JAN-DEC	JUL-SEP

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 5 (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
451	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
	Redtail surfperch		X	X	X	X	X	X	X	X	X	X	X	X	FEB-NOV	-	-	JAN-DEC	FEB-NOV
	Rockfish		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	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	APR-NOV	-	-	APR-NOV	APR-NOV
	Starry flounder		X	X	X	X	X	X	X	X	X	X	X	X	-	-	FEB-NOV	JAN-DEC	JAN-DEC
	Surf smelt		X	X	X	X	X	X	X	X	X	X	X	X	-	-	OCT-MAR	JAN-DEC	JAN-DEC
	Threespine stickleback		X	X	X	X	X	X	X	X	X	X	X	X	-	-	JUN-SEP	JUL-DEC	JAN-DEC
	Topsmelt		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	White croaker						X	X	X	X	X	X	X	X	-	-	-	APR-SEP	APR-SEP
454	Bay pipefish		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Pacific herring		X	X	X	X	X	X	X	X			X	X	NOV-MAR	NOV-MAR	NOV-MAR	MAR-AUG	NOV-MAR
455	Barred surfperch		X	X	X	X	X	X							FEB-JUL	-	-	FEB-JUL	FEB-JUL
	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	-	-	FEB-NOV	FEB-NOV
	Surf smelt						X	X	X	X	X	X			MAY-OCT	-	-	MAY-OCT	MAY-OCT
456	Night smelt		X	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	-	-	FEB-NOV	FEB-NOV
	Surf smelt						X	X	X	X	X	X	X	X	MAY-OCT	-	-	MAY-OCT	MAY-OCT
464	Pacific herring		X	X	X	X	X	X	X	X			X	X	NOV-MAR	NOV-MAR	NOV-MAR	MAR-AUG	NOV-MAR
466	Steelhead	T	X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-APR	JAN-MAY	JAN-DEC	DEC-MAR
494	Steelhead	T	X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-APR	JAN-MAY	JAN-DEC	DEC-MAR
500	Steelhead	T	X	X	X									X	-	-	-	-	DEC-MAR
501	Coho salmon	E E	X	X	X	X	X	X	X	X	X	X	X	X	DEC-JAN	-	FEB-AUG	JAN-DEC	DEC-JAN
	Pacific herring		X	X	X	X	X	X	X	X			X	X	NOV-MAR	NOV-MAR	NOV-MAR	MAR-AUG	NOV-MAR
	Steelhead	T	X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-APR	JAN-MAY	JAN-DEC	DEC-MAR
	Tidewater goby	E	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	-	-	-	JAN-DEC
532	Steelhead	T	X	X	X									X	DEC-MAR	-	-	-	DEC-MAR

INVERTEBRATE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
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
382	California bay shrimp		X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Dungeness crab		X	X	X	X	X	X	X	X	X	X	X	X	-	-	APR-JUN	JAN-DEC	JAN-DEC
450	California butterclam		X	X	X	X	X	X	X	X	X	X	X	X	MAR-NOV	-	-	-	JAN-DEC
	Pacific gaper		X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Washington butterclam		X	X	X	X	X	X	X	X	X	X	X	X	MAR-NOV	-	-	-	JAN-DEC
451	Brown rock crab		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	California bay shrimp		X	X	X	X	X	X	X	X	X	X	X	X	-	-	APR-JUL	JAN-DEC	JAN-DEC
	Dungeness crab		X	X	X	X	X	X	X	X	X	X	X	X	-	-	APR-JUN	JAN-DEC	-
	Geoduck		X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	MAR-AUG	MAR-AUG	JAN-DEC	JAN-DEC
	Pacific littleneck		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	MAR-SEP	MAR-SEP	JAN-DEC	JAN-DEC
	Red rock crab		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
454	Zebra leafslug		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
456	Pacific razor clam		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-	JAN-DEC	JAN-DEC
463	California mussel		X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	-	-	JAN-DEC	JAN-DEC
	Red abalone		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	APR-JUL	APR-JUL	JAN-DEC	JAN-DEC
628	Myrtle's silverspot	E	X	X	X	X			X	X	X	X	X	X	AUG-SEP	AUG-NOV	MAR-MAY	-	AUG-SEP
633	California freshwater shrimp	E E	X	X	X	X	X	X	X	X	X	X	X	X	MAR-MAY	-	-	JAN-DEC	JAN-DEC
635	Monarch butterfly		X	X										X	X	-	-	-	NOV-FEB

MARINE MAMMAL:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Pupping	Molting
302	Harbor porpoise	MODERATE	X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	JUN-AUG	-	-
310	Harbor seal	8 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
451	California sea lion		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Harbor seal		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
459	California sea lion	4-1395 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Harbor seal	16-64 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Steller sea lion	T 5-29 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
460	Harbor seal	9-85 INDIV.	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
461	Blue whale	E LOW						X	X	X	X	X	X	X	-	-	-	-
	Humpback whale	E MODERATE						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	-	-	-	-
646	Gray whale		X	X	X	X	X						X	X	-	DEC-FEB	-	-
651	Bottlenose dolphin	LOW	X	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	X	-	-	-	-
	Fin whale	E LOW	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 saddleback dolphin	LOW	X	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	X	-	MAR-MAY	-	-
	North Pacific right whale	E LOW				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	-	-	-	-
	Sea lions	LOW-MODERATE	X	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	X	-	-	-	-
	Seals	LOW-MODERATE	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Short-beaked saddleback 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	-	-	-	-
653	Harbor porpoise	MODERATE	X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	JUN-AUG	-	-
655	Blue whale	E LOW						X	X	X	X	X	X	X	-	-	-	-
	Humpback whale	E MODERATE						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	X	-	-	-	-	MAY-NOV
619	California red-legged frog		X	X	X	X	X	X	X	X	X	X	X	X	NOV-APR	-	-	JAN-DEC	JAN-DEC
637	Northwestern pond turtle		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-	JAN-DEC	JAN-DEC
652	Leatherback sea turtle	E HIGH						X	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
381	Northern river otter		X	X	X	X	X	X	X	X	X	X	X	X
453	Northern river otter		X	X	X	X	X	X	X	X	X	X	X	X
458	Northern river otter		X	X	X	X	X	X	X	X	X	X	X	X

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Northern California: ESIMAP 5 (cont.)

HUMAN USE RESOURCES:

ACCESS:

HUN#	Name	Contact	Phone
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5	ARCHED ROCK BEACH	CDFG	
8	BODEGA DUNES	CDFG	
11	CARMET BEACH	CDFG	
14	COLEMAN'S BEACH	CDFG	
26	MARCHALL GULCH	CDFG	
30	MIWOK BEACH	CDFG	

AQUACULTURE:

HUN#	Name	Contact	Phone
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67	BODEGA FISH FARMS	CDFG	
68	BODEGA FISH/OCEAN FARMS INC	CDFG	
69	BODEGA MARINE LAB	UNIV. OF CA - PETER CONNERS, RESERVE MANAGER	707/875-4261

BEACH:

HUN#	Name	Contact	Phone
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89	ARCHED ROCK BEACH	CDFG	
94	BODEGA DUNES	CDFG	
96	CARMET BEACH	CDFG	
99	COLEMAN'S BEACH	CDFG	
110	MIWOK BEACH	CDFG	

BOAT RAMP:

HUN#	Name	Contact	Phone
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133	DORAN PARK	CDFG	
141	WESTSIDE REGIONAL PARK	CDFG	

CRITICAL HABITAT:

HUN#	Name	Contact	Phone
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164	BODEGA BAY MONARCH BUTTERFLY	CDFG	

ESSENTIAL HABITAT:

HUN#	Name	Contact	Phone
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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
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176	BODEGA SMR	CDFG	
207	SONOMA COAST SMCA	CDFG	

MARINA:

HUN#	Name	Contact	Phone
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216	BODEGA HARBOR	CDFG	
224	MASONS MARINA	CDFG	
228	PORTO BODEGA	CDFG	
231	SPUD POINT MARINA	CDFG	

MARINE SANCTUARY:

HUN#	Name	Contact	Phone
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235	GULF OF THE FARALLONES NMS	NOAA	415/561-6622

PARK:

HUN#	Name	Contact	Phone
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265	SONOMA COAST SB	CDPR	707/875-3483

WATER INTAKE:

HUN#	Name	Contact	Phone
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294	BODEGA HEAD	CDFG	