

Central and Northern California Coastal Marine Habitats: Oil Residence and Biological Sensitivity Indices

RELATIVE ABUNDANCE OF MAJOR MACROBIOTA*

Taxa	A	B	C	D
ROCKY INTERTIDAL MACROBIOTA				
Acorn barnacles				
Chlorophyta				
Porphyra spp.				
Pelvetiopsis limitata				
Endocladia muricata		C		
Pelvetia fastigiata				
Fucus distichus				
Gigartina spp.		C		
Pollicipes polymerus		O		
Mytilus californianus		C		
Corallina spp./Gigartina spp.				
Postelsia palmaeformis				
Halosaccion glandiforme				
Iridaea spp.		C		
Odonthalia spp./Rhodomela larix				
Coralline algae		C		
Phyllospadix spp.		C		
Alaria marginata				
Egregia menziesii		C		
Laminaria spp.				
Lessoniopsis littoralis				
OTHER MACROBIOTA				
Kelp beds:				
Macrocystis spp.				
Nereocystis luetkeana				
Marine mammals:				
Elephant seal				
Harbor seal				
Steller sea lion				
California sea lion				
Seabird nesting colonies:				
Fork-tailed storm petrel				
Leach's storm petrel				
Ashy storm petrel				
Brandt's cormorant				
Double-crested cormorant				
Pelagic cormorant				
Black oystercatcher				
Western gull				
Common murre				
Pigeon guillemot				
Cassin's auklet				
Rhinoceros auklet				
Tufted puffin				
Threatened/Endangered Species:				
Aleutian Canada goose				
Southern sea otter				

*Relative abundance for summer conditions: O = occasional, C = common, A = abundant

PHYSICAL SHORE-ZONE CHARACTERISTICS

UNIT IDENTIFIERS	A	B	C	D
ALONGSHORE LENGTH (km)	2.2	1.5	1.0	0.0
ACROSS-SHORE WIDTH (m)	75	75	75	-
WAVE EXPOSURE	10	10	10	3-4
ACROSS-SHORE COMPONENTS (morphology, texture)	D1,Cs Bb,Cs Bf,Cs	Ca,Rs Bb,Csp Bf,Cs	Cp,Rs D1,Cs Bb,Csg Bf,Cs	Rs,Csm Ee,Csm: Rs
Primary				
Secondary				
MICRO RELIEF	S	S	S	-
MACRO RELIEF	S	S	S	-
SUMMARY CHARACTERISTICS	bs	bsv	bs	E
OIL RESIDENCE INDEX	2	2	2	1
GROUND TRUTH	0	0	0	0

ABBREVIATED PHYSICAL SHORE-ZONE CODING EXPLANATION

This is an abbreviated legend for the physical shore-zone coding sheets; consult the main text for a complete discussion of codes and rationale. Only the across-shore descriptors for morphology and texture are discussed.

ACROSS-SHORE COMPONENTS - dominant morphologic and textural character of each across-shore component, described in a landward to seaward sequence. Each component consists of a geomorphic form descriptor and a substrate descriptor:
FORM - Bb, Csg - TEXTURE

The primary geomorphic forms are initially described by a series of 12 codes:

A Anthropogenic	E Coastal Bay, Lagoon, Estuary	P Platform
B Beach	I Inlet	R River
C Cliff	M Marsh	S Bar/Trough
D Dune	O Offshore Rocks	T Delta

Each of these groups is then further modified by codes as indicated below.

Anthropogenic (A)

e causeway	j jetty	m marina	t trench
f float	g groin	r boat ramp	s seawall
			w wharf

Beach (B)

b berm	i inclined slope	s storm ridge
c washover channel	m multiple intertidal bars	t low-tide terrace
f beach face	r single intertidal bar	w washover

Cliff (C)

a active or erosional	p passive	c caves present
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Dune (D)

b blowout	f foredune	s ridge and swale
d stabilized	r random form	l longitudinal

Coastal Bay, Lagoon, Estuary (E)

b enclosed bay	e estuary
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Inlet (I)

e ephemeral	a opening fixed by offshore structures	l obb-tidal delta
s stable	f flood-tidal delta	

Marsh (M)

c tidal creek	s sea stack
e intertidal reef	r rock outcrop (>2 m above M.S.L. and <10 m in width or length)

Offshore Rocks (O)

e intertidal reef	s sea stack
r rock outcrop (>2 m above M.S.L. and <10 m in width or length)	

Platform (P)		
h high-tide platform	f horizontal	t terraced
l low-tide platform	r ramp	i irregular

River (R)		
b braided	m multiple	s single channel

Bar/Trough (S) subtidal	r with rip channels
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Delta (D)		
c channel	m multiple channels	p delta plain
f fan	s single channel	v crevasse
l levee		

Substrate type or sediment texture are described in detail by a series of codes. The sediments or materials of the shore are initially coded into one of four groups:

A anthropogenic materials	C clastic sediments
B biogenic sediments	R bedrock

Each of these groups is then further modified by texture or composition as indicated below.

Anthropogenic materials (A)

a metal	n concrete (solid)	w bark or wood debris
d debris, rubble	t logs	
e concrete (individually formed)	u wood (structural; e.g., pilings or boards)	

Biogenic sediments (B)

l trees or wood particles	o organic litter
s shell hash (with a texture as described below)	

Clastic sediments (C)

b boulder	s sand	m mud
c cobble	sl silt	g gravel
p pebble	cl clay	r rubble

Bedrock (R)

i igneous	m metamorphic	s sedimentary
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Where more than one texture is present in an across-shore component, several substrates or textures may be indicated. Where one texture physically overlies another, it is indicated by a slash (e.g. Ca/Rs, and over rock). Where several mutually exclusive textures occur within a component, such as rock outcrops within a sand beach, a colon is used to indicate that association (e.g., Ca:Rl).

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