

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

RELATIVE ABUNDANCE OF MAJOR MACROBIOTA*

Taxa	A	B	C	D	E	F	G	H	I	J	K	L	M	N
ROCKY INTERTIDAL MACROBIOTA														
Acorn barnacles			0	0	0	0	0	0	0	0				
Chlorophyta			C-A	C-A	C-A	C-A	C-A	C-A	C-A					
Porphyra spp.			C	C	C	C	C	C	C					
Pelvetiopsis limitata			C	C	C	C	C	C	C					
Endocladia muricata			C	C	C	C	C	C	C					
Pelvetia fastigiata			0	0	0	0	0	0	0					
Fucus distichus			0	0	0	0	0	0	0					
Gigartina spp.			C	C	C	C	C	C	C					
Pollicipes polymerus			C	C	C	C	C	C	C					
Mytilus californianus			C	C	C	C	C	C	C					
Corallina spp./Gigartina spp.			0	0	0	0	0	0	0	C-A				
Postelsia palmaeformis			C-A	C	C	C	C	C	C					
Halosaccion glandiforme														
Iridaea spp.			C	C	C	C	C	C	C					
Odonthalia spp./Rhodomeia larix			C	C	C	C	C	C	C	0-C				
Coralline algae			C	C	C	C	C	C	C					
Phyllospadix spp.			C	C	C	C	C	C	C					
Alaria marginata			C	C	C	C	C	C	C					
Egregia menziesii			C	C	C	C	C	C	C					
Laminaria spp.			C	C	C	C	C	C	C					
Lessoniopsis littoralis			C	C	C	C	C	C	C					
OTHER MACROBIOTA														
Kelp beds:														
Macrocystis spp.														
Nereocystis luetkeana										0-C	0		0	0
Marine mammals:														
Elephant seal			0	0										
Harbor seal					0-A				0				A	
Steller sea lion			0	0										
California sea lion			0-A	0-A					0					
Seabird nesting colonies:														
Fork-tailed storm petrel														
Leach's storm petrel														
Ashy storm petrel														
Brandt's cormorant			A											
Double-crested cormorant														
Pelagic cormorant			A											
Black oystercatcher			0											
Western gull			C											
Common murre			A											
Pigeon guillemot			C-A											
Cassin's auklet														
Rhinoceros auklet														
Tufted puffin			0											
Threatened/Endangered Species:														
Aleutian Canada goose														
Southern sea otter														

*Relative abundance for summer conditions: 0 = occasional, C = common, A = abundant

PHYSICAL SHORE-ZONE CHARACTERISTICS

UNIT IDENTIFIERS	A	B	C	D	E	F	G	H	I	J	K	L	M	N	
ALONGSHORE LENGTH (km)	1.5	0.2	2.5	0.8	0.6	0.6	0.2	2.8	2.3	3.7					
ACROSS-SHORE WIDTH (m)	50-100	-	0-10	0-10	0-5	10-20	<20	20	20	50-100	0.2	1.2	0.3	4.1	
WAVE EXPOSURE	10	1-10	10	10	10	10	10	10	10	10	-	100	-	75-100	
ACROSS-SHORE COMPONENTS (morphology, texture)	Dld,Cs Bf,Cs Ca,Cs Bf,Cs *	Eb,Cs Ie,Cs Bb,Cs Bf,Cs	Cc,Rm Oer,Rm	Cc,Rm Oer,Rm Cc,Rm Bi,Crcs Oer,Rm	Cc,Rm Oer,Rm	Cc,Rm Or,Rm	Cc,Rm Ors,Rm	Cc,Rm Ors,Rm	Cc,Rm Bi,Crg: Rm Pi,Cr Rm Ors,Rm	Ca,Rs Bi,Ceg: Rs Bi,Cs: Rs Cp,Rs As,An Aw,Aw	Ca,Rs Bf,Cr Bf,Cs: Rs	1-10 10 Eb,Csc Bw,Cs Bf,Cs	Ca,Rs Dl,Cs Bb,Cs Bf,Cs	Eb,Csm: Rs If,Cs Is,Cs Il,Cs	Dld,Cs Bb,Cs Bf,Cs Db,Cs Bw,Cs Bf,Cs
MICRO RELIEF	S	-	R	R	R	R	R	R	R	S	-	S	-	S	
MACRO RELIEF	S	-	R	R	R	R	R	R	R	S	-	S	-	S	
SUMMARY CHARACTERISTICS	bs	IeE	RvO	Rb'mvO	Rv	Rb'mO	Rv	Rb'mO	Rb's	bs	bsE	bs	IsE	bs	
OIL RESIDENCE INDEX	2	1-2	3	3	3	3	3	3	3	3	1-2	2	1	1-2	
GROUND TRUTH	3	0	0	0	0	0	0	0	0	3	0	0	0	0,4	

* Beach berm may be present during summer accretional period.

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

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

Inlet (I)

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

Marsh (M)

c tidal creek

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 l irregular

River (R)

b braided m multiple s single channel

Bar/Trough (S)

r with rip channels

Delta (T)

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 c clastic sediments
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 # silt g gravel
p pebble # clay r rubble

Bedrock (R)

I igneous m metamorphic s sedimentary

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., Cb/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., CsRi).

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