

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
ROCKY INTERTIDAL MACROBIOTA											
Acorn barnacles	0	0	0	0	0	0	0	0	0	0	
Chlorophyta	0-C	0-C	0-C		0-C	0-C	C	0	C	C	
Porphyra spp.											0
<i>Pelvetiopsis limitata</i>	C	C	C	0	C	C	C	0	C	C	
<i>Endocladia muricata</i>	C	C	C	0	C	C	C	0	C	C	
<i>Pelvetia fastigiata</i>									0	0	
<i>Fucus distichus</i>	C	C	C	0	0	0	0	0	0-C	0-C	
<i>Gigartina</i> spp.	C	C	C	0	C	C	C	0	C	C	
<i>Pollicipes polymerus</i>	C	C	C	C	C	C	C		C	C	
<i>Mytilus californianus</i>	C	C	C	C	C	C	C		C	C	
<i>Corallina</i> spp./ <i>Gigartina</i> spp.	0	0	0	0	0	0	0		0	0-C	
<i>Postelsia palmaeformis</i>	C	C	C	C	C	C	C		C	C	
<i>Halosaccion glandiforme</i>	0	0	0	0	0	0	0		0	0	
<i>Iridaea</i> spp.	C	C	C	C	C	C	C		C	C	
<i>Odonthalia</i> spp./ <i>Rhodomela larix</i>	0-C	0-C	0-C	0-C	0-C	0-C	0-C		0-C	0-C	
Coralline algae	C	C	C	0	C	C	C	C	C	C	
<i>Phyllospadix</i> spp.	C	C	C	0	C	C	C	0	C	C	
<i>Alaria marginata</i>	C	C	C	0	C	C	C	0	C	C	
<i>Egregia menziesii</i>	C	C	C	0	C	C	C		C	C	
<i>Laminaria</i> spp.	C	C	C		C	C	C		C	C	
<i>Lessoniopsis littoralis</i>	C	C	C		0	0	0		0	0	
OTHER MACROBIOTA											
Kelp beds:											
<i>Macrocystis</i> spp.									0-C	0-C	
<i>Nereocystis luetkeana</i>									0-C	0-C	
Marine mammals:											
Elephant seal											
Harbor seal			0	0	0						
Steller sea lion											
California sea lion					0						
Seabird nesting colonies:											
Fork-tailed storm petrel											
Leach's storm petrel											
Ashy storm petrel											
Brandt's cormorant			C								
Double-crested cormorant											
Pelagic cormorant			0-A	A	C	C	C	C	C	C	
Black oystercatcher			0	0	0	0	0	0	0	0	
Western gull			0-C	C	0	0	0	0	0	0	
Common murre											
Pigeon guillemot			0-C	0	0	0	0	0	0	0	
Cassin's auklet											
Rhinoceros auklet											
Tufted puffin											
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
ALONGSHORE LENGTH (km)	1.2	0.3	1.9	1.1	0.5	0.6	1.0	0.6	0.2	0.2	0.0
ACROSS-SHORE WIDTH (m)	30	<10	10-50	50-75	0-15	0-20	20-30	40	5-10	50	-
WAVE EXPOSURE	10	10	10	10	10	10	10	10	10	10	1
ACROSS-SHORE COMPONENTS (morphology, texture)	Ca, Rs Bf, Cr Bf, Csb Ores, Rs	Cc, Rs Ore, Rs	Ca, Rs Bi, Cr Ore, Rs Ca, Rs Bi, Cr Bi, Cg: Rs Pi, Rs Ore, Rs	Ca, Rs Bf, Cs: Rs Ore, Rs	Ca, Rs Ph, Rs Ore, Rs	Ca, Rs Ore, Rs	Ca, Rs Bi, Cgr Bi, Cs: Rs Ores, Rs	Ca, Cg Bb, Cg Bf, Cs: Rs Ore, Rs	Ca, Rs Pi, Cr Rs Ore, Rs	Ca, Rs Bi, Cg: Rs Ore, Rs	Rs, Cs Ee, Csg
MICRO RELIEF	S	R	R	S	R	R	R	S	R	R	S
MACRO RELIEF	R	R	R	S	R	R	R	S	R	S	S
SUMMARY CHARACTERISTICS	bsv	Rv0	Rb'mv0	bsv	RP	Rbmv0	Rbsv0	bsv	RPv	Rbsv0	E
OIL RESIDENCE INDEX	3	3	3	3	3	3	3	2	3	3	1
GROUND TRUTH	2	0	0	0	0	0	0	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

Dune (D)
b blowout f foredune s ridge and swale
d stabilized r random form l longitudinal

Coastal Bay, Lagoon, Estuary (E)
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 i irregular

River (R)
b braided m multiple s single channel

Bar/Trough (S) subtidal 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 u 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)
i trees or wood particles o organic litter
s shell hash (with a texture as described below)

Clastic sediments (C)
s sand m mud
b boulder g gravel
c cobble s silt
p pebble d 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., 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., Cs:Ri).

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Sheet 2 of 2