

# 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
<b>ROCKY INTERTIDAL MACROBIOTA</b>											
Acorn barnacles			0		0			0	0		
Chlorophyta					0				0	0	
Porphyra spp.			0		0			0	0		
Pelvetiopsis limitata			0		0			0	0		
Endocladia muricata			0		0			0	0		
Pelvetia fastigiata											
Fucus distichus											
Gigartina spp.					0			0	0		
Pollicipes polymerus			0								
Mytilus californianus			0								
Corallina spp./Gigartina spp.											
Postelsia palmaeformis											
Halosaccion glandiforme											
Iridaea spp.			0								
Odonthalia spp./Rhodomela larix											
Coralline algae			0								
Phyllospadix spp.											
Alaria marginata											
Egregia menziesii											
Laminaria spp.											
Lessoniopsis littoralis											
<b>OTHER MACROBIOTA</b>											
<b>Kelp beds:</b>											
Macrocystis spp.											
Nereocystis luetkeana											
<b>Marine mammals:</b>											
Elephant seal											
Harbor seal				0							
Steller sea lion				0							
California sea lion				0							
<b>Seabird nesting colonies:</b>											
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											
<b>Threatened/Endangered Species:</b>											
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)	2.1	3.9	0.4	2.6	0.8	0.2	2.7	0.3	0.4	1.0	0.3	
ACROSS-SHORE WIDTH (m)	100-150	100	10	100	100	-	100-150	10	75-100	50-75	-	
WAVE EXPOSURE	1-10	10	10	10	10	1-10	10	10	10	10	1-10	
ACROSS-SHORE COMPONENTS (morphology, texture)	DL, Csp Bs, Csp Bb, Cs Bf, Cs S, Cs	Cp, Rs DL, Csp Bw, Csp Bs, AT Cgb	Ca, Rs Ph, Cb Rs Ore, Rs Rs, Csg	Cp, Rs Bi, AT Cb Bb, Csp Bf, Csp Ore, Rs S, Cs	Ca, Rs Bi, Cgb Rs Bf, Cg Rs Ore, Rs	Rs, Csg Is, Csg	Ae, An Bs, Csp Bb, Csp Bf, Csp	Ca, Rs Bi, Ccbg Ore, Rs Bf, Csp	Ca, Rs Bb, Csp Rs Bf, Csp Ore, Rs	Bs, Csp Bb, AT Csp Bf, Csp	Eb, Cs Bo Bw, Cs Be, Csp Bf, Csp	
Primary	Bw, Cs	Bb, AT	Rs, Csg	S, Cs	Ore, Rs							
Secondary	Bc, Cs Bb, Cs Bf, Cs	Bf, Cps Ore, Rs S, Cs	Bf, Cg									
MICRO RELIEF	S	S	R	R	R	-	S	R	R	S	-	
MACRO RELIEF	S	S	R	S	S	-	S	R	S	S	-	
SUMMARY CHARACTERISTICS	bs	bgIe	Rv	bs	bgv	IsE	bg	Rbmv	bmv	bg	bgE	
OIL RESIDENCE INDEX	1-2	1-2	3	2	3	1-2	2	3	2	2	1-2	
GROUND TRUTH	0	0	0	0,4	0	0	3	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	Δ 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	
s stable	f flood-tidal delta	l ebb-tidal delta

**Marsh (M)**

c tidal creek		
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**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
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**Bar/Trough (S)**

subtidal	r with rip channels	
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**Delta (Δ)**

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 elastic 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	l logs	u wood (structural; e.g., pilings or boards)
e concrete (individually formed)		

**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	Δ silt	g gravel
p pebble	Δ 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., Cs/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:Rl).

Prepared for  
**Minerals Management Service**  
Pacific Outer Continental Shelf Region  
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November, 1982

**M.M.S. Map# 124**  
**Sheet 2 of 2**