

# 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
<b>ROCKY INTERTIDAL MACROBIOTA</b>												
Acorn barnacles		0		0	0		0		0	0	0	0
Chlorophyta		C		C	C		C		C	C	C	C
Porphyra spp.		0		0	0		0		0-C	0-C	0-C	0-C
Pelvetiopsis limitata		C		C	C		C		C	C	C	C
Endocladia muricata		C		C	C		C		C	C	C	C
Pelvetia fastigiata												
Fucus distichus												
Gigartina spp.		C		C	C		C		C	C	C	C
Pollicipes polymerus		C		C	C		C		C	C	C	C
Mytilus californianus		C		C	C		C		C	C	C	C
Corallina spp./Gigartina spp.		0-C		0-C	0-C		0-C		0-C	0-C	0-C	0-C
Postelsia palmaeformis		C		C	C		C		C	C	C	C
Halosaccion glandiforme		C		C	C		C		C	C	C	C
Iridaea spp.		C		C	C		C		C	C	C	C
Odonthalia spp./Rhodomela larix		0		0	0		0		0	0	0	0
Coralline algae		C		C	C		C		C	C	C	C
Phyllospadix spp.		C		C	C		C		C	C	C	C
Alaria marginata		C		C	C		C		C	C	C	C
Egregia menziesii		C		C	C		C		C	C	C	C
Laminaria spp.		C		C	C		C		C	C	C	C
Lessoniopsis littoralis		C		C	C		C		C	C	C	C
<b>OTHER MACROBIOTA</b>												
<b>Kelp beds:</b>												
Macrocystis spp.												
Nereocystis luetkeana				C	C		C	C	C	C	C	C
<b>Marine mammals:</b>												
Elephant seal												
Harbor seal				C-A	0		0-C	0-C		0		
Steller sea lion											0	
California sea lion												
<b>Seabird nesting colonies:</b>												
Fork-tailed storm petrel												
Leach's storm petrel												
Ashy storm petrel												
Brandt's cormorant												
Double-crested cormorant												
Pelagic cormorant					C		C					
Black oystercatcher					0		0					
Western gull					0		0					
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	L	
ALONGSHORE LENGTH (km)	0.6	0.4	1.0	0.8	5.3	0.2	1.5	0.3	1.1	4.9	0.1	0.2	
ACROSS-SHORE WIDTH (m)	50-75	75	75	20-100	5-50	-	<5	20	5-50	5-50	50	5-30	
WAVE EXPOSURE	10	10	10	10	10	1-10	10	1-10	10	10	1-10	10	
ACROSS-SHORE COMPONENTS (morphology, texture)	D1,Cs Bs,At Cs BF,Cs Or,Rs	Ca,Cs BF,Cs: Cs Or,Rs	Ae,Ad Bw,Cs BF,Cs	Cc,Rs Pi,Cgb Rs Ore,Rs	Cc,Rs Pi,Rs Ie,Cs Ore,Rs Cc,Rs BF,Csg: Rs Ore,Rs	Rs,Cs Ie,Cs Il,Cs	Cc,Rs Ore,Rs	Ca,Rs Bi,Ccbs Ore,Rs	Cc,Rs Ore,Rs Cc,Rs Bi,Csb Ca,Rs BF,Csr BF,Cs Ores,Rs	Cc,Rs Pi,Rs Ore,Rs	Ca,Rs Bb,Cs BF,Cs Or,R	Cc,Rm Pi,Rm Ores,R	Cc,Rm Pi,Rm Ores,R
MICRO RELIEF	S	S	S	R	R	-	R	R	R	R	S	R	
MACRO RELIEF	S	R	S	R	R	-	R	S	R	R	S	R	
SUMMARY CHARACTERISTICS	bs	Rbmv	bs	RPvO	RPb'mvO	Ie	RPO	bmIsE	Rb'svO	RPb'sO	bsIe	RPb'mO	
OIL RESIDENCE INDEX	2	3	1-2	3	3	1-2	3	1-2	3	3	1-2	3	
GROUND TRUTH	0	0	2,4	2	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
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**Dune (D)**

b blowout	f foredune	u 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	c 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 (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	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	a sand	m mud
c cobble	s silt	g gravel
p pebble	f 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., Cs:RI).

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**M.M.S. Map# 102**  
**Sheet 2 of 2**