

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

## RELATIVE ABUNDANCE OF MAJOR MACROBIOTA\*

Taxa	A	B	C
<b>ROCKY INTERTIDAL MACROBIOTA</b>			
Acorn barnacles			
Chlorophyta			
Porphyra spp.			
Pelvetiopsis limitata			
Endocladia muricata			
Pelvetia fastigiata			
Fucus distichus			
Gigartina spp.			
Pollicipes polymerus			
Mytilus californianus			
Corallina spp./Gigartina spp.			
Postelsia palmaeformis			
Halosaccion glandiforme			
Iridaea spp.			
Odonthalia spp./Rhodomela larix			
Coralline algae			
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			
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
ALONGSHORE LENGTH (km)	14.0	0.8	0.9
ACROSS-SHORE WIDTH (m)	100-150	-	100
WAVE EXPOSURE	10	1-10	10
ACROSS-SHORE COMPONENTS (morphology, texture)	Dl, Cs Bs, At Cs Bb, Cs Bf, Cs Bt, Cs S, Cs	Eb, Cms: Bo Ia, Ae	Dl, Cs Bs, At Cs Bb, Cs Bf, Cs Bt, Cs S, Cs
MICRO RELIEF	S	-	S
MACRO RELIEF	S	-	S
SUMMARY CHARACTERISTICS	bs	IsE	bs
OIL RESIDENCE INDEX	2	1-2	2
GROUND TRUTH	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, Csp + 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	a 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 (T)**

c channel	m multiple channels	p delta plain
f fan	u 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	l 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., 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).

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by  
**Woodward-Clyde Consultants**  
Environmental Systems Division  
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**M.M.S. Map# 117**  
**Sheet 2 of 2**