

# 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
<b>ROCKY INTERTIDAL MACROBIOTA</b>									
Acorn barnacles						0			
Chlorophyta					0	C	0	0	0
Porphyra spp.					0		0	0	0
Pelvetiopsis limitata					0	C	0	0	0
Endocladia muricata					0	C	0	0	0
Pelvetia fastigiata									
Fucus distichus					0	0-C	0	0	0
Gigartina spp.					0	C	0	0	0
Pollicipes polymerus					0	C	0	0	0
Mytilus californianus					0	C	0	0	0
Corallina spp./Gigartina spp.					0	C	0	0	0
Postelsia palmaeformis					0	C	0	0	0
Halosaccion glandiforme					0	C	0	0	0
Iridaea spp.					0	C	0	0	0
Odonthalia spp./Rhodomela larix					0	C	0	0	0
Coralline algae					0	C	0	0	0
Phyllospadix spp.					0	C	0	0	0
Alaria marginata					0	C	0	0	0
Egregia menziesii					0	C	0	0	0
Laminaria spp.					0	C	0	0	0
Lessoniopsis littoralis					0	C	0	0	0
<b>OTHER MACROBIOTA</b>									
<b>Kelp beds:</b>									
Macrocystis spp.									
Nereocystis luetkeana									
<b>Marine mammals:</b>									
Elephant seal									
Harbor seal						0-C	0-C		
Steller sea lion	0					0	0		
California sea lion						0	0		
<b>Seabird nesting colonies:</b>									
Fork-tailed storm petrel									
Leach's storm petrel									
Ashy storm petrel									
Brandt's cormorant						A			
Double-crested cormorant									
Pelagic cormorant						0-A			
Black oystercatcher						0			
Western gull						0-A			
Common murre						A			
Pigeon guillemot						0-A			
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
ALONGSHORE LENGTH (km)	6.3	0.0	3.1	0.4	3.6	0.5	0.6	0.6	0.3
ACROSS-SHORE WIDTH (m)	100	-	30-75	-	10-50	0-20	30	20-50	50-100
WAVE EXPOSURE	1-10	1	10	1-10	10	10	10	10	10
ACROSS-SHORE COMPONENTS (morphology, texture)	Dld,Cs Bw,Cs Bb,Cs Bf,Cs	Ee,Cs: Bo	Ca,Rs Bb,Cg Bf,Cg	Rs,Csg Ie,Csg Bb,Csg Bf,Csg	Ca,Rs Bi,Cgb: Rs Ore,Rs	Ca,Rs Ore,Rs	Ca,Rs Bi,Cbc Ore,Rs	Ca,Rs Bi,Cbc Pf,Cb Rs Ores,Rs	Ca,Rs Bi,At Cg Bi,Cg
Primary									
Secondary									
MICRO RELIEF	S	-	S	S	R	R	R	R	S
MACRO RELIEF	S	-	S	S	S	R	R	R	R
SUMMARY CHARACTERISTICS	bs	E	bg	Ie	Rbm	RbmV0	RbmV	RPbmV	bgv
OIL RESIDENCE INDEX	1-2	1	2	1-2	3	3	3	3	3
GROUND TRUTH	3	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)**  
b 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 v delta plain  
f fan s single channel w 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 t 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 s silt g gravel  
p pebble f 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., 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:Ri).

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

**M.M.S. Map# 114**  
**Sheet 2 of 2**