

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	M	N
ROCKY INTERTIDAL MACROBIOTA														
Acorn barnacles	0		0	0	0		0		0		0	0	0	0
Chlorophyta	0		0	0										
Porphyra spp.	0		0	0										
Pelvetiopsis limitata	0		0	0	0		0		0		0	0	0	0
Endocladia muricata	C		C	C	C		C		C		C	C	C	C
Pelvetia fastigiata	0		0	0	C		C		C		C	0	C	C
Fucus distichus	0		0	0	0		0		0		0	0	0	0
Gigartina spp.	C		C	C	C		C		C		C	C	C	C
Pollicipes polymerus	0		0	0	0		0		0		0	0	0	0
Mytilus californianus	0		0	0	0		0		0		0	0	0	0
Corallina spp./Gigartina spp.	C		C	C	C		C		C		C	C	C	C
Postelsia palmaeformis	C		C	C	C		C		C		0	0	0	0
Halosaccion glandiforme	C		C	C	C		C		C		C	C	C	C
Iridaea spp.	C		C	C	C		C		C		C	C	C	C
Odonthalia spp./Rhodomela larix														
Coralline algae	C-A		C-A	C-A	C-A		C-A		C-A		C-A	C-A	C-A	C-A
Phyllospadix spp.	C		C	C	C		C	C			C	C	C	C
Alaria marginata	C		C	C	C		C		C		C	C	C	C
Egregia menziesii	C		C	C	C		C		C		C	C	C	C
Laminaria spp.	C		C	C	C		C		C		C	C	C	C
Lessoniopsis littoralis														
OTHER MACROBIOTA														
Kelp beds:														
Macrocystis spp.	C-A		C-A	C-A	C		C		C		C	C	C	C
Nereocystis luetkeana	C		C	C	C		C		C		C	C	C	C
Marine mammals:														
Elephant seal														
Harbor seal			0-C						0				0-A	
Steller sea lion				0										
California sea lion			0-C											
Seabird nesting colonies:														
Fork-tailed storm petrel														
Leach's storm petrel														
Ashy storm petrel														
Brandt's cormorant	0-A		A											
Double-crested cormorant														
Pelagic cormorant	C		0-C						C					
Black oystercatcher	0								0					
Western gull	0-C		C						0					
Common murre	A		A											
Pigeon guillemot	0-C		0-C						0					
Cassin's auklet														
Rhinoceros auklet														
Tufted puffin														
Threatened/Endangered Species:														
Aleutian Canada goose														
Southern sea otter	C	C	C	C	C	C	C	C	C	C	C	C	C	C

*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	M	N
ALONGSHORE LENGTH (km)	0.3	1.3	2.0	1.3	0.1	0.1	0.5	1.6	1.0	0.2	0.7	0.7	0.5	0.3
ACROSS-SHORE WIDTH (m)	<5	100-150	20	10-30	0-10	-	5-30	50-100	<5	50	30-100	60	5-20	75
WAVE EXPOSURE	10	10	10	10	10	1-10	10	1-10	10	8	10	1-10	10	10
ACROSS-SHORE COMPONENTS (morphology, texture)	Cc,Rs Ore,Rs	Ca,Rs Bb,Cs BF,Cs: Rs	Ca,Rs Pi,Rs Ores,Rs	Ca,Rs Bi,Cgb Pi,Cb Rs	Ca,Rs Or,Rs Ca,Rs Bi,Cs Or,Rs	Rs,Cs Ie,Cs Bt,Cs	Ca,Rs Bi,Cbr: Rs Ore,Rs	Dl,Cs Bw,Cs Bb,Cs Bf,Cs: Rs	Ca,Rv Ore,Rs	Cp,Cs Bi,Cs: Rs Bt,Csb Ore,Rs	Ca,Rs Bi,Csb: Rs PF,Cb Rs Ore,Rs	Ca,Cs Bi,Cs: Rs Pi,Cb Rs Ore,Rs	Ca,Rs Pi,Rs Ore,Rs	Cp,Rs Bi,Cs: Rs PF,Cb Rs Ore,Rs
Primary														
Secondary														
MICRO RELIEF	R	S	R	R	R	-	R	S	R	S	R	S	R	R
MACRO RELIEF	R	S	R	R	R	-	R	S	R	S	R	S	R	S
SUMMARY CHARACTERISTICS	RO	bs	Rb'mvO	Rb'mvO	R	Ie	Rb'svO	bs	RO	bs	RPvO	bsvO	RO	RPbsvO
OIL RESIDENCE INDEX	3	2	3	3	3	1-2	3	1-2	3	3	3	1-3	3	3
GROUND TRUTH	0	0	0	0	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, Cgb, Cgr ← TEXTURE

The primary geomorphic forms are initially described by a series of 12 codes:

A Anthropogenic E Coastal Bay, Lagoon, Estuary F 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)

b enclosed bay 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 n 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)

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 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 s sand m mud
c cobble # silt g gravel
p pebble # 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., Cb:Ri).

Prepared for
Minerals Management Service
Pacific Outer Continental Shelf Region
Los Angeles, California

by
Woodward-Clyde Consultants
Environmental Systems Division
San Francisco, California

November, 1982

M.M.S. Map# 61
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