

1 - Bedrock - CC 1-20 - VE

9 - Sediment - CC 21 - 30 - SE/E 2 - Bedrock - CC 1-20 - E

3 - Bedrock/Boulder - CC 1-23, 32, 33 - SE Current Dominated 10 - Bedrock or Sediment - CC 34 - VP/P/SP 4 - Bedrock/Gravel - CC 1-23, 33 - SP 5 - Bedrock/Gravel - CC 1-23,33 - P/VP

CC	Туре		CC	Туре		
Rock Sł	ock Shore Types - characterized by a lack of clastic sediments such as gravel or sand.		Sediment 9	Shore Types - have substrates that have little or no bedcrock cropping out		
	1 Rock Ramp, Wide		21	Gravel Flat, Wide		
	2 Rock Platform Wide		22	Gravel Beach		
	3 Rock Cliff Narrow		23	Gravel Flat or Fan		
	4 Rock Ramp, Narrow		24	Sand and Gravel Flat or Fan, Wide		
	5 Rock Platform Narrow		25	Sand and Gravel Beach		
Rock ar	ock and Sediment Shore Types - rock and pockets of clastic sediments		26	Sand and Gravel Flat or Fan, Narrow		
	6 Ramp with Gravel Beach, Wide		27	Sand Beach, Wide		
	7 Platform with Gravel Beach, Wide		28	Sand Flat		
	8 Cliff with Gravel Beach		29	Mud Flat		
	9 Ramp with Gravel Beach, Narrow		30	Sand Beach, Narrow		
	10 Platform with Gravel Beach, Narrow		31	Estuaries		
	11 Ramp with Sand and Gravel Beach, Wide		Man-Made Materials			
	12 Platform with Sand and Gravel Beach, Wide		32	Man-made, permeable		
	13 Cliff with Sand and Gravel Beach		33	Man-made, impermeable		
	14 Ramp with Sand and Gravel Beach, Narrow		Current Dominated			
	15 Platform with Sand and Gravel Beach, Narrow		34	Channel		
	16 Ramp with Sand Beach, Wide		35	Tidal Lagoon		
	17 Platform with Sand Beach, Wide					
	18 Cliff with Sand Beach					
	19 Ramp with Sand Beach, Narrow					
	20 Platform with Sand Beach, Narrow	T				

Each Habitat Type has a definition that includes the typical substrate, wave exposure and biobands. For example, for the Semi-exposed, Immobile substrate Habitat Type, part of the definition of that class is a certain combination of the most likely

How is Habitat Type determined? Each Habitat Type has typical biological features (including both an indicator species list and typical associated biobands).

To determine the Habitat Type, the biomapper looks at the along-shore Units as designated and described by the physical mapper, and 1. □ records the observations of the biobands in the unit and looks for indicator species,

2. □ assigns a bio-(wave) exposure category,
3. □ reviews the physical mapped information, and
4. □ assigns the Habitat Type that best describes the unit.

The Habitat Type is based on the whole unit and is similar to the physical mappers use of the 'Coastal Class' category, in that the detailed across-shore data are summarized into one attribute. The simplified category describes the features of the whole unit.

Habitat Type is a summary of the biophysical classification of the whole shore unit, based on: • □ the biobands observed, □the wave exposure as indicated by the bands, and • the substrate types in the unit.

Legend Definitions
CC - Coastal Classification number

biobands and indictor species present at a bedrock shoreline with no mobile sediment present.

E - Exposed - Very high wave exposure, open ocean swellsm usually fetches >500km VE - Very Exposed - Extreme high wave exposure SE - Semi Exposed - High wave exposure, open shorelines, areas between fully exposed and more sheltered, usually fetches 50 to 500km

P - Protected - Low wave expsoure, sheltered inlets, usually fetches less than 10km SP - Semi Protected - Moderate wave expsoure, partly sheltered, usually fetches 10-50km VP - Very Protected - Very low wave exposure, fethces < 1km, sheltered anchorages at heads of bays and inletes

SUBSTRATE STABILITY		IMMO	MOBILE OR PARTIALLY MOBILE SUBSTRATES				CURRENT DOMI- NATED			
MAJOR SUBSTRATE	BEDROCK	BEDROCK	BEDROCK/BOULDER	BEDROCK/GRAVEL	BEDROCK/GRAVEL	SAND & GRAVEL	SAND & GRAVEL	ESTUARY or SAND/MUD	SEDIMENT	BEDROCK (SEDIMEN'
COASTAL CLASSES	1-20	1-20	1-23, 32, 33	1-23, 33	1-23, 33	24, 25, 26, 32	24, 25, 26, 32	27, 28, 29, 30, 31	21-30	34
EXPOSURE (EXP BIO)	VE	E	SE	SP	VP, P	SP	VP, P	VP, P, SP	SE, E	VP, P, S
(HAB_OBS)	1	2	3	4	5	6	7	8	9	10
upper	Verrucaria Balanus glandula	Verrucaria Balanus glandula	Verrucaria Enteromorpha Balanus glandula	Verrucaria Enteromorpha Balanus glandula	Verrucaria Enteromorpha Balanus glandula	Verrucaria Enteromorpha Balanus glandula	Verrucaria Enteromorpha Balanus glandula	grasses & rushes Salicornia virginica Baianus glandula		tidal current dominated; n be a protecte wave exposu but shows an
middle	Pollicipes polymerus Mytilus californianus	Pollicipes polymerus Mytilus californianus	Fucus distichus Mytilus californianus	Fucus distichus Mytilus trossulus	Fucus distichus Mytilus trossulus	Fucus distichus Mytilus trossulus	Fucus distichus Mytilus trossulus	Fucus distichus Mytilus trossulus		
	[Semi balanus carriosus]	Semibalanus carriosus	Semibalanus carriosus	Semibalanus carriosus Ulva/ Ulvaria spp.	Ulva/ Ulvaria spp.	Semibalanus carriosus Ulva/ Ulvaria spp.	Ulva/Ulvaria spp.	Ulva/ Ulvaria	no visible	assemblage of indicator spe
mid/low	[Alaria 'nana' morph]	Halosaccion Hedophyllun Alaria 'nana' morph Codium frag Phyllosp adix Egregla men		Halosaccion glandiforme Codium fragile	Halosaccion glandiforme	Halosaccion glandiforme Halosaccion glandiforme Codium fragile			intertidal macrobiota due to sediment mobility	from higher wave exposu Assemblage observed is 'anomalous'
lower	Lessoniopsis littoralis [Laminaria setchelli] lush foliose coralline reds: Bossiella/ Calliarthron/ Corallina	Lessoniopsis littoralis Laminaria setchelli foliose coralline reds	ittoralis chelli Laminaria setchelli		Laminaria saccharina	Laminaria groenlandica Laminaria saccharina Alaria 'marginata'morph	Laminaria saccharina			the wave ener of the site.
subtidal	Lithothannion Nereocystis luetkeana	Lithothamnion Nereocystis luetkeana	Lithothammion Nereocystis luetkeana	Lithothamnion Nereocystis luetkeana		Lithothamnion Nereocystis luetkeana			4	
Suottua	rereocysus ruemeuma	Nereocysus memeana	Macrocystis integrifolia Agarum spp. Strongylocentrotus franciscanus	Macrocystis integrifolia Agarum spp. Strongylocentrotus franciscanus	Macrocystis integrifolia Agarum spp.	Macrocystis integrifolia Agarum spp. Strongylocentrotus franciscanus	Macrocystis integrifolia Agarum spp.			

