

## 7 - Sand & Gravel - CC 24-26,32 - VP/P Immobile Substrates 8 - Estuary or Sand/Mud - CC 27-31 - VP/P/SP 1 - Bedrock - CC 1-20 - VE 2 - Bedrock - CC 1-20 - E 9 - Sediment - CC 21 - 30 - SE/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 S	e Types - characterized by a lack of clastic sediments such as gravel or sand.		Sediment :	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 a	nd 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		
	1 Ramp with Sand and Gravel Beach, Wide		Man-Made	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 Do	ominated		
	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					

The Habitat Type provides a simplified picture of the "look" of the unit overall, based on the detailed biophysical attributes that have been mapped. The Habitat Type category is a summary of the observations of both the unit's biologial and geomorphological 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 biobands and indictor species present at a bedrock shoreline with no mobile sediment present.

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:

VP - Very Protected - Very low wave exposure, fethces < 1km, sheltered anchorages at heads of bays and inletes

• the biobands observed, □the wave exposure as indicated by the bands, and • the substrate types in the unit.

Legend Definitions
CC - Coastal Classification number

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

							I		virginica	. I	
	l	Balanus glandula	Balamıs giandula	Balanus glandula Fucus distichus	Balanus glandula Fucus distichus	Balanus glandula Fucus distichus	Balanus glandula Fucus distichus	Balanus glandula Fucus distichus	Balanus glandula Fucus distichus		tidal current dominated; may
	m: Adla	Dellista es externoses	Dallida es a demons	Fucus aisticinis	Fucus arstrenus	Fucus aisticnus	FRCR3 GISTICHUS	Pucus aisticnus	Pucus austichus		
	middle	Pollicipes polymerus Mytilus californianus	Pollicipes polymerus Mytilus californianus	Mytilus californianus							be a protected wave exposure
	l .				Mytilus trossulus		but shows an				
	l .	[Semi balanus carriosus]	Semibalanus carriosus	Semibalanus carriosus	Semibalanus carriosus		Semibalanus carriosus				assemblage of
		L			Ulva/ Ulvaria spp.	Ulva/ Ulvaria spp.	Ulva/ Ulvaria spp.	Ulva/Ulvaria spp.	Ulva/ Ulvaria	no visible	indicator species
	mid/low	l		Halosaccion glandiforme	Halosaccion glandiforme	Halosaccion glandiforme	Halosaccion glandiforme	Halosaccion glandiforme		intertidal	from higher
	ı			Hedophyllum sessile			1			macrobiota due to	wave exposures.
	ı	[Alaria 'nana' morph]	Alaria 'nana' morph	C-1:	C-1: 6 !!-		G-1: 6			sediment	Assemblage
	ı	ı		Codium fragile	Codium fragile		Codium fragile			mobility	observed is
	ı	l		Phyllospadix scouleri Egregia menziesii						moonity	'anomalous' for
	lower	Lessoniopsis littoralis	Lessoniopsis littoralis	and of the street of							the wave energy
		[Laminaria setchelli]	Laminaria setchelli	Laminaria setchelli							of the site.
	l .	lush foliose coralline	foliose coralline reds	Laminaria groenlandica	Laminaria groenlandica		Laminaria groenlandica				
	l .	reds: Bosstella/		diverse mixed red algae	Laminaria saccharina	Laminaria saccharina	Laminaria saccharina	Laminaria saccharina			
	l .	Calliarthron/Corallina		Alaria 'marginata'morph	Alaria 'marginata'morph		Alaria 'marginata'morph				
	l .										
		Lithothannion	Lithothamnion	Lithothannion	Lithothannion		Lithothannion				
	subtidal	Nereocystis luetkeana	Nereocystis luetkeana	Nereocystis luetkeana	Nereocystis luetkeana		Nereocystis luetkeana				
	ı	ı		Macrocystis integrifolia	Macrocystis integrifolia	Macrocystis integrifolia	Macrocystis integrifolia	Macrocystis integrifolia			
	ı	ı		Agarum spp.	Agarum spp.	Agarum spp.	Agarum spp.	Agarum spp.			
	ı	ı		Strongylocentrotus franciscanus	Strongylocentrotus franciscanus		Strongylocentrotus franciscanus				
Olema	ı	l		Jranciscanas	Zostera marina						
0km	* T. 1.1'	in the same the same at a second		"							
*Bolding indicates diagnostic species used to distinguish "communities". Square brackets [] enclose species at VE AB_OBS 1 which may be present but are in reduced abundance and size. No											

VP, P

SUBSTRATES

SAND & GRAVEL SAND & GRAVEL SAND/MUD SEDIMENT SEDIMENT

27, 28, 29, 30, 31

VP, P, SP SE, E VP, P, SP

8 | 9 | 10

NATED

IMMOBILE SUBSTRATES

COASTAL CLASSES

EXPOSURE (EXP BIO) COMMUNITY CODE (HAB\_OBS)

BEDROCK BEDROCK/BOULDER BEDROCK/GRAVEL BEDROCK/GRAVEL

species assemblages are as diagnostic as species' presence. Community Code type 1 (VE - very exposed) occurs only on the southwest coast of Moresby Island.

