



Legend

○ Unit Break Points

— Undefined

Immobile Substrates

- 1 - Bedrock - CC 1-20 - VE
- 2 - Bedrock - CC 1-20 - E
- 3 - Bedrock/Boulder - CC 1-23, 32, 33 - SE
- 4 - Bedrock/Gravel - CC 1-23, 33 - SP
- 5 - Bedrock/Gravel - CC 1-23,33 - PNP

Mobile/Partially Mobile Substrates

- 6 - Sand & Gravel - CC 24-26, 32 - SP
- 7 - Sand & Gravel - CC 24-26,32 - VP/P
- 8 - Estuary or Sand/Mud - CC 27-31 - VP/P/SP
- 9 - Sediment - CC 21 - 30 - SE/E
- 10 - Bedrock or Sediment - CC 34 - VP/P/SP
- 11 - Bedrock or Sediment - CC 35 - VP/P/SP

Current Dominated

Tidal Lagoon

Data Source:

Shoreline Type
GeoBC Coastal Resource Shorezone Database, 2008

Base Information
1:20,000 GeoBC Terrain Resource Information Management (TRIM) Database

1:20,000

0 0.25 0.5 1
Kilometers

W N
S E

CC	Type	CC	Type
Rock Shores - Types - characterized by a lack of clastic sediments such as gravel or sand.		Sediment Shores - Types - have substrates that have little or no bedrock cropping out.	
1) Rock Ramp, Wide	21) Gravel Flat, Wide	22) Gravel Beach	
2) Rock Platform, Wide	23) Gravel Flat or Fan	24) Sand and Gravel Flat or Fan, Wide	
3) Rock Cliff, Narrow	25) Sand and Gravel Beach	26) Sand and Gravel Beach	
4) Rock Ramp, Narrow	27) Sand and Gravel Beach	28) Sand and Gravel Beach	
5) Rock Platform, Narrow	29) Sand and Gravel Beach	30) Sand and Gravel Beach	
6) Beach with Gravel Beach, Wide	31) Gravel	32) Sand Beach, Wide	
7) Platform with Gravel Beach, Wide	33) Sand Beach, Wide	34) Sand Beach, Wide	
8) Cliff with Gravel Beach	35) Sand Beach, Wide	36) Sand Beach, Wide	
9) Beach with Gravel Beach, Narrow	37) Sand Beach, Wide	38) Sand Beach, Wide	
10) Platform with Gravel Beach, Narrow	39) Sand Beach, Wide	40) Sand Beach, Wide	
11) Beach with Sand and Gravel Beach, Wide	41) Sand Beach, Wide	42) Sand Beach, Wide	
12) Cliff with Sand and Gravel Beach	43) Sand Beach, Wide	44) Sand Beach, Wide	
13) Beach with Sand and Gravel Beach, Narrow	45) Sand Beach, Wide	46) Sand Beach, Wide	
14) Platform with Sand and Gravel Beach, Narrow	47) Sand Beach, Wide	48) Sand Beach, Wide	
15) Beach with Sand Beach, Wide	49) Sand Beach, Wide	50) Sand Beach, Wide	
16) Platform with Sand Beach, Wide	51) Sand Beach, Wide	52) Sand Beach, Wide	
17) Cliff with Sand Beach	53) Sand Beach, Wide	54) Sand Beach, Wide	
18) Beach with Sand Beach, Narrow	55) Sand Beach, Wide	56) Sand Beach, Wide	
19) Platform with Sand Beach, Narrow	57) Sand Beach, Wide	58) Sand Beach, Wide	

Shoreline Habitat

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 units biological and geomorphological features. 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 indicator 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 map, 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

Wave Exposure

- E - Exposed - Very high wave exposure, open ocean swells 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 exposure, sheltered inlets, usually fetches less than 10km
- SP - Semi Protected - Moderate wave exposure, partly sheltered, usually fetches 10-50km
- VP - Very Protected - Very low wave exposure, fetches < 1km, sheltered anchorages at heads of bays and inlets

Table MIDCOAST and NORTH COAST project area which includes BCO AREAS CC, JS and NC. The Species/ wave exposure/ substrate table for Habitat Classification (HAB, OBS), for the Mid-coast BC study area, from Johnstone Strait/Central Coast Mapping Regions 5, 6 and 7.

SUBSTRATE STABILITY MAJOR SUBSTRATE	IMMOBILE SUBSTRATES				MOBILE OR PARTIALLY MOBILE SUBSTRATES				CURRENT-DOMINATED	TIDAL LAGOON
	BEDROCK	BEDROCK/BOULDER	BEDROCK/GRAVEL	BEDROCK/GRAVEL	SAND & GRAVEL	SAND & GRAVEL	SAND/MUD	SEDIMENT		
COASTAL CLASSES	1-20	1-23, 32, 33	1-23, 33	1-23, 33	24-30, 32	24-30, 32	24-30, 32	24-30, 32	34	35
EXPOSURE	E	SE	SP	VP, P	no SAL band	no SAL band	has SAL band	VP, P, SP	VP, P, SP	VP, P, SP
COMMUNITY CODE (HAB OBS)	2	3	4	5	6	7	8	9	10	11
upper	<i>Verrucaria</i>	<i>Verrucaria</i> <i>Enteromorpha</i>	<i>Verrucaria</i> <i>Enteromorpha</i>	<i>Verrucaria</i> <i>Enteromorpha</i>	<i>Verrucaria</i> <i>Enteromorpha</i>	<i>Verrucaria</i> <i>Enteromorpha</i>	<i>grasses & rushes</i> <i>Salicornia</i> <i>virginica</i>			
	<i>Balanus glandula</i>	<i>Balanus glandula</i> <i>Pisum delticum</i>	<i>Balanus glandula</i> <i>Pisum delticum</i>	<i>Balanus glandula</i> <i>Pisum delticum</i>	<i>Balanus glandula</i> <i>Pisum delticum</i>	<i>Balanus glandula</i> <i>Pisum delticum</i>	<i>Balanus glandula</i> <i>Pisum delticum</i>			
middle	<i>Falkenbergia polymerus</i> <i>Mytilus californianus</i> <i>Semibalanus cariosus</i>	<i>Mytilus californianus</i> <i>Semibalanus cariosus</i>	<i>Mytilus californianus</i> <i>Semibalanus cariosus</i>	<i>Mytilus californianus</i> <i>Semibalanus cariosus</i>	<i>Mytilus californianus</i> <i>Semibalanus cariosus</i>	<i>Mytilus californianus</i> <i>Semibalanus cariosus</i>	<i>Mytilus californianus</i> <i>Semibalanus cariosus</i>			
mid/low	<i>Alaria 'vase' morph</i>	<i>Hydrophyllum scutell</i>	<i>Hydrophyllum scutell</i>	<i>Hydrophyllum scutell</i>	<i>Hydrophyllum scutell</i>	<i>Hydrophyllum scutell</i>	<i>Hydrophyllum scutell</i>			
lower	<i>Laminaria digitata</i>	<i>Laminaria digitata</i>	<i>Laminaria digitata</i>	<i>Laminaria digitata</i>	<i>Laminaria digitata</i>	<i>Laminaria digitata</i>	<i>Laminaria digitata</i>			
subtidal	<i>Nereocystis lachnana</i>	<i>Nereocystis lachnana</i>	<i>Nereocystis lachnana</i>	<i>Nereocystis lachnana</i>	<i>Nereocystis lachnana</i>	<i>Nereocystis lachnana</i>	<i>Nereocystis lachnana</i>			

