



**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

**Current Dominated**

- 10 - Bedrock or Sediment - CC 34 - VP/P/SP
- 11 - Bedrock or Sediment - CC 35 - VP/P/SP

**Tidal Lagoon**

- 12 - 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

N

W

S

E

CC	Type	CC	Type
1	Rock Shore Types - characterized by a lack of classic sediments such as gravel or sand.	21	Gravel Flat, Wide
2	Rock Ramp, Wide	22	Gravel Beach
3	Rock Platform, Wide	23	Gravel Flat or Fan
4	Rock Cliff, Narrow	24	Sand and Gravel Flat or Fan, Wide
5	Rock Ramp, Narrow	25	Sand and Gravel Beach
6	Rock Platform, Narrow	26	Sand and Gravel Flat or Fan, Narrow
7	Rock and Sediment Shore Types - rock and pockets of classic sediments	27	Sand Beach, Wide
8	Heavy with Gravel Beach, Wide	28	Sand Flat
9	Platform with Gravel Beach, Wide	29	Mud Flat
10	Cliff with Gravel Beach	30	Sand Beach, Narrow
11	Heavy with Gravel Beach, Narrow	31	Cliff
12	Platform with Gravel Beach, Narrow	32	Sand Beach, Wide
13	Heavy with Sand and Gravel Beach, Wide	33	Sand Beach, Wide
14	Cliff with Sand and Gravel Beach	34	Gravel
15	Heavy with Sand and Gravel Beach, Narrow	35	Tidal Lagoon
16	Platform with Sand and Gravel Beach, Wide		
17	Platform with Sand Beach, Wide		
18	Cliff with Sand Beach		
19	Heavy with Sand Beach, Narrow		
20	Platform with Sand Beach, Narrow		

## 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 unit's 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 BIO-AREAS CC-35 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 COASTAL CLASSES EXPOSURE (OBS-OBS) COMMUNITY CODE (HAB-OBS)	IMMOBILE SUBSTRATES				MOBILE OR PARTIALLY MOBILE SUBSTRATES				CURRENT-DOMINANT BEDROCK OR SEDIMENT	TIDAL LAGOON BEDROCK OR SEDIMENT
	BEDROCK	BEDROCK/BOULDER	BEDROCK/GRAVEL	BEDROCK/GRAVEL	SAND & GRAVEL	SAND & GRAVEL	SAND/MUD	SEDIMENT		
1-20	1-23, 32, 33	1-23, 33	1-23, 33	1-23, 33	24-30, 32	24-30, 32	24-30, 31	24-30	34	35
E	SE	SP	VP, P	VP, P	no SAL band	no SAL band	has SAL band	VP, P, SP	VP, P, SP	VP, P, SP
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 &amp; rushes</i> <i>Salicornia</i> <i>virginica</i>			
	<i>Balanus glandula</i> <i>Pisces distichus</i>	<i>Balanus glandula</i> <i>Pisces distichus</i>	<i>Balanus glandula</i> <i>Pisces distichus</i>	<i>Balanus glandula</i> <i>Pisces distichus</i>	<i>Balanus glandula</i> <i>Pisces distichus</i>	<i>Balanus glandula</i> <i>Pisces distichus</i>	<i>Balanus glandula</i> <i>Pisces distichus</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 'vasei' 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>			
	<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>			
	<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>			

