



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

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**
- 11 - Bedrock or Sediment - CC 35 - VP/P/SP

CC	Type	CC	Type
Rock Shore Types - characterized by a lack of clastic sediments such as gravel or sand.		Sediment Shore Types - have substrates that have little or no bedrock 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	
6 Sand and Gravel Beach		26 Sand and Gravel Flat or Fan, Narrow	
7 Sand and Gravel Beach		27 Sand Beach, Wide	
8 Platform with Gravel Beach, Wide		28 Sand Flat	
9 Cliff with Gravel Beach		29 Mud Flat	
10 Beach with Gravel Beach, Narrow		30 Sand Beach, Narrow	
11 Platform with Gravel Beach, Wide		31 Clastic	
12 Beach with Sand and Gravel Beach, Wide		32 Main Muds, permeable	
13 Cliff with Sand and Gravel Beach		33 Main Muds, impermeable	
14 Beach with Sand and Gravel Beach, Narrow		34 Channel	
15 Platform with Sand and Gravel Beach, Wide		35 Tidal Lagoon	
16 Beach with Sand Beach, Wide			
17 Platform with Sand Beach, Wide			
18 Cliff with Sand Beach			
19 Beach 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 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 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

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, 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 COASTAL CLASSES EXPOSURE (OBS, OBS)	IMMOBILE SUBSTRATES				MOBILE OR PARTIALLY MOBILE SUBSTRATES				CURRENT-DOMINANT NATED	TIDAL LAGOON
	BEDROCK	BEDROCK/BOULDER	BEDROCK/GRAVEL	BEDROCK/CLAY	SAND & GRAVEL	SAND & GRAVEL	SAND/MUD	SEDIMENT		
1-20	1-23, 32, 33	SE	SP	VP, P	24-30, 32 no SAL band	24-30, 31 no SAL band	24-30, 31 has SAL band	24-30 VP, P, SP	34 VP, P, SP	35 VP, P, SP
COMMUNITY CODE (OBS, OBS)	2	3	4	5	6	7	8	9	10	11
upper	<i>Verrucaria</i> <i>Enteromorpha</i> <i>Balanus glandula</i> <i>Pilayella littoralis</i>	<i>Verrucaria</i> <i>Enteromorpha</i> <i>Balanus glandula</i> <i>Pilayella littoralis</i>	<i>Verrucaria</i> <i>Enteromorpha</i> <i>Balanus glandula</i> <i>Pilayella littoralis</i>	<i>Verrucaria</i> <i>Enteromorpha</i> <i>Balanus glandula</i> <i>Pilayella littoralis</i>	<i>Verrucaria</i> <i>Enteromorpha</i> <i>Balanus glandula</i> <i>Pilayella littoralis</i>	<i>Verrucaria</i> <i>Enteromorpha</i> <i>Balanus glandula</i> <i>Pilayella littoralis</i>	<i>grasses & rushes</i> <i>Salicornia virginica</i> <i>Balanus glandula</i> <i>Pilayella littoralis</i>	no visible macroalgae due to sediment mobility	tidal current dominated; may be a Protected wave exposure but shows an assemblage of indicator species from higher wave exposures. Asemblage observed in "anomalous" for the wave energy of the site.	<i>Balanus glandula</i> <i>Pilayella littoralis</i>
middle	<i>Alaria 'vasei' morph</i>	<i>Hydrophyllum scutell</i>	<i>Phyllospora senilis</i>	<i>Phyllospora senilis</i>	<i>Alaria 'vasei' morph</i>	<i>Hydrophyllum scutell</i>	<i>Phyllospora senilis</i>	<i>Phyllospora senilis</i>	<i>Phyllospora senilis</i>	<i>Phyllospora senilis</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>
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>

