



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

- 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**

CC	Type	CC	Type
Rock Shore Types - characterized by a lack of classic sediments such as gravel or sand.		Sediment Shore Types - have substrates that have little or no bedrock cropping out.	
1 Rock Ramp, Wide	23 Gravel Flat, Wide		
2 Rock Platform, Wide	24 Gravel Beach		
3 Rock Cliff, Narrow	25 Gravel Flat or Fan		
4 Rock Ramp, Narrow	26 Sand and Gravel Flat or Fan, Wide		
5 Rock Platform, Narrow	27 Sand and Gravel Beach		
	28 Sand and Gravel Flat or Fan, Narrow		
Rock and Sediment Shore Types - rock and pockets of classic sediments			
6 Beach with Gravel Beach, Wide	29 Sand Beach, Wide		
7 Platform with Gravel Beach, Wide	30 Sand Flat		
8 Cliff with Gravel Beach	31 Mud Flat		
9 Beach with Gravel Beach, Narrow	32 Sand Beach, Narrow		
10 Platform with Gravel Beach, Narrow	33 Cliffs		
11 Beach with Sand and Gravel Beach, Wide	34 Main Marine		
12 Platform with Sand and Gravel Beach, Wide	35 Main Marine, permeable		
13 Cliff with Sand and Gravel Beach	36 Main Marine, impermeable		
14 Beach with Sand and Gravel Beach, Narrow	37 Main Marine, impermeable		
15 Platform with Sand and Gravel Beach, Narrow	38 Channel		
16 Beach with Sand Beach, Wide	39 Tidal Lagoon		
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 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 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 COASTAL CLASSES EXPOSURE (OBS-REQ)	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	BEDROCK OR SEDIMENT	BEDROCK OR 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	VP, P	VP, P, SP	VP, P, SP	VP, P, SP	VP, P, SP		
2	3	4	5	6	7	8	9	10	11			
upper	<i>Vernicaria</i>	<i>Vernicaria</i> <i>Enteromorpha</i>	<i>Vernicaria</i> <i>Enteromorpha</i>	<i>Vernicaria</i> <i>Enteromorpha</i>	<i>Vernicaria</i> <i>Enteromorpha</i>	<i>Vernicaria</i> <i>Enteromorpha</i>	<i>grasses & rushes</i> <i>Salicornia</i> <i>virginica</i>					
	<i>Balanus glandula</i>	<i>Balanus glandula</i> <i>Pucus distichus</i>	<i>Balanus glandula</i> <i>Pucus distichus</i>	<i>Balanus glandula</i> <i>Pucus distichus</i>	<i>Balanus glandula</i> <i>Pucus distichus</i>	<i>Balanus glandula</i> <i>Pucus distichus</i>	<i>Balanus glandula</i> <i>Pucus distichus</i>					
middle	<i>Falkenbergia</i> <i>Mytilus californianus</i>	<i>Mytilus californianus</i> <i>Semibalanus cariosus</i>	<i>Mytilus californianus</i> <i>Semibalanus cariosus</i>	<i>Mytilus prolatus</i> <i>Ulex libanensis</i>	<i>Mytilus prolatus</i> <i>Ulex libanensis</i>	<i>Mytilus prolatus</i> <i>Ulex libanensis</i>	<i>Mytilus prolatus</i> <i>Ulex libanensis</i>					
	<i>Semibalanus cariosus</i>											
mid/low	<i>Alaria 'vauis' morph</i>	<i>Hydrophyllum scutell</i>										
	<i>Laminaria digitata</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>Macrocystis integrifolia</i>	<i>Macrocystis integrifolia</i>	<i>Macrocystis integrifolia</i>	<i>Macrocystis integrifolia</i>	<i>Macrocystis integrifolia</i>	<i>Macrocystis integrifolia</i>	<i>Macrocystis integrifolia</i>					
	<i>Strongylocentrotus</i>	<i>Strongylocentrotus</i>	<i>Strongylocentrotus</i>	<i>Strongylocentrotus</i>	<i>Strongylocentrotus</i>	<i>Strongylocentrotus</i>	<i>Strongylocentrotus</i>					
	<i>Fructuarius</i>	<i>Fructuarius</i>	<i>Fructuarius</i>	<i>Fructuarius</i>	<i>Fructuarius</i>	<i>Fructuarius</i>	<i>Fructuarius</i>					
	<i>Zostera marina</i>	<i>Zostera marina</i>	<i>Zostera marina</i>	<i>Zostera marina</i>	<i>Zostera marina</i>	<i>Zostera marina</i>	<i>Zostera marina</i>					

