



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	
	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	
Rock Shore Types - characterized by a lack of clastic sediments such as gravel or sand.	
13 Rock Ramp, Wide	
23 Rock Platform, Wide	
24 Rock Cliff, Narrow	
25 Rock Ramp, Narrow	
26 Rock Platform, Narrow	
Rock and Sediment Shore Types - rock and pockets of clastic sediments	
27 Beach with Gravel Beach, Wide	
28 Platform with Gravel Beach, Wide	
29 Cliff with Gravel Beach	
30 Beach with Gravel Beach, Narrow	
31 Platform with Gravel Beach, Narrow	
32 Beach with Sand and Gravel Beach, Wide	
33 Platform with Sand and Gravel Beach, Wide	
34 Cliff with Sand and Gravel Beach	
35 Beach with Sand and Gravel Beach, Narrow	
36 Platform with Sand and Gravel Beach, Narrow	
37 Beach with Sand Beach, Wide	
38 Cliff with Sand Beach	
39 Beach with Sand Beach, Narrow	
40 Platform with Sand Beach, Narrow	
CC Type	
Sediment Shore Types - have substrates that have little or no bedrock cropping out.	
21 Gravel Flat, Wide	
22 Gravel Beach	
23 Gravel Flat or Fan	
24 Sand and Gravel Flat or Fan, Wide	
25 Sand and Gravel Beach	
26 Sand and Gravel Beach, Narrow	
27 Sand Beach, Wide	
28 Mud Flat	
29 Mud Flat	
30 Sand Beach, Narrow	
31 Estuary	
32 Man-made, permeable	
33 Man-made, impermeable	
34 Channel	
35 Tidal Lagoon	

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 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-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	IMMOBILE SUBSTRATES					MOBILE OR PARTIALLY MOBILE SUBSTRATES				CURRENT-DOMINANT	TIDAL LAGOON
	BEDROCK	BEDROCK/BOULDER	BEDROCK/GRAVEL	BEDROCK/GRAVEL	SAND & GRAVEL	SAND & GRAVEL	SAND/MUD	SEDIMENT	BEDROCK OR SEDIMENT		
COASTAL EXPOSURE	1-20	1-23, 32, 33	1-23, 33	1-23, 33	24-30, 32	24-30, 32	24-30, 32	24-30	34	35	
COMMUNITY CODE (HAB-OBS)	E	SE	SP	VP, P	SP	VP, P	VP, P, SP	VP, P, SP	VP, P, SP	VP, P, SP	
upper	<i>Verrucaria</i> <i>Enteromorpha</i> <i>Balanus glandula</i> <i>Mytilus californianus</i> <i>Semibalanus cariosus</i>	<i>Verrucaria</i> <i>Enteromorpha</i> <i>Balanus glandula</i> <i>Mytilus californianus</i> <i>Semibalanus cariosus</i>	<i>Verrucaria</i> <i>Enteromorpha</i> <i>Balanus glandula</i> <i>Mytilus californianus</i> <i>Semibalanus cariosus</i>	<i>Verrucaria</i> <i>Enteromorpha</i> <i>Balanus glandula</i> <i>Mytilus californianus</i> <i>Semibalanus cariosus</i>	<i>Verrucaria</i> <i>Enteromorpha</i> <i>Balanus glandula</i> <i>Mytilus californianus</i> <i>Semibalanus cariosus</i>	<i>Verrucaria</i> <i>Enteromorpha</i> <i>Balanus glandula</i> <i>Mytilus californianus</i> <i>Semibalanus cariosus</i>	<i>Verrucaria</i> <i>Enteromorpha</i> <i>Balanus glandula</i> <i>Mytilus californianus</i> <i>Semibalanus cariosus</i>	<i>grasses & rushes</i> <i>Salicornia virginica</i> <i>Balanus glandula</i> <i>Mytilus californianus</i> <i>Semibalanus cariosus</i>	<i>grasses & rushes</i> <i>Salicornia virginica</i> <i>Balanus glandula</i> <i>Mytilus californianus</i> <i>Semibalanus cariosus</i>	<i>grasses & rushes</i> <i>Salicornia virginica</i> <i>Balanus glandula</i> <i>Mytilus californianus</i> <i>Semibalanus cariosus</i>	<i>Balanus glandula</i> <i>Fucus distichus</i>
middle	<i>Alaria 'vasei' morph</i>	<i>Hydrophyllum scutell</i>	<i>Phyllospora scutell</i>	<i>Phyllospora scutell</i>	<i>Phyllospora scutell</i>	<i>Phyllospora scutell</i>	<i>Phyllospora scutell</i>	<i>Phyllospora scutell</i>	<i>Phyllospora scutell</i>	<i>Phyllospora scutell</i>	<i>Phyllospora scutell</i>
lower	<i>Laminaria littoralis</i>	<i>Laminaria littoralis</i>	<i>Laminaria littoralis</i>	<i>Laminaria littoralis</i>	<i>Laminaria littoralis</i>	<i>Laminaria littoralis</i>	<i>Laminaria littoralis</i>	<i>Laminaria littoralis</i>	<i>Laminaria littoralis</i>	<i>Laminaria littoralis</i>	<i>Laminaria littoralis</i>
subtidal	<i>Nereocystis lachnana</i> <i>Macrocystis integrifolia</i> <i>Agardh</i> spp. <i>Strongylocentrotus</i> <i>Fructicans</i>	<i>Nereocystis lachnana</i> <i>Macrocystis integrifolia</i> <i>Agardh</i> spp. <i>Strongylocentrotus</i> <i>Fructicans</i>	<i>Nereocystis lachnana</i> <i>Macrocystis integrifolia</i> <i>Agardh</i> spp. <i>Strongylocentrotus</i> <i>Fructicans</i>	<i>Nereocystis lachnana</i> <i>Macrocystis integrifolia</i> <i>Agardh</i> spp. <i>Strongylocentrotus</i> <i>Fructicans</i>	<i>Nereocystis lachnana</i> <i>Macrocystis integrifolia</i> <i>Agardh</i> spp. <i>Strongylocentrotus</i> <i>Fructicans</i>	<i>Nereocystis lachnana</i> <i>Macrocystis integrifolia</i> <i>Agardh</i> spp. <i>Strongylocentrotus</i> <i>Fructicans</i>	<i>Nereocystis lachnana</i> <i>Macrocystis integrifolia</i> <i>Agardh</i> spp. <i>Strongylocentrotus</i> <i>Fructicans</i>	<i>Nereocystis lachnana</i> <i>Macrocystis integrifolia</i> <i>Agardh</i> spp. <i>Strongylocentrotus</i> <i>Fructicans</i>	<i>Nereocystis lachnana</i> <i>Macrocystis integrifolia</i> <i>Agardh</i> spp. <i>Strongylocentrotus</i> <i>Fructicans</i>	<i>Nereocystis lachnana</i> <i>Macrocystis integrifolia</i> <i>Agardh</i> spp. <i>Strongylocentrotus</i> <i>Fructicans</i>	<i>Nereocystis lachnana</i> <i>Macrocystis integrifolia</i> <i>Agardh</i> spp. <i>Strongylocentrotus</i> <i>Fructicans</i>

