



**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

**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**

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

**Tidal Lagoon**

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

CC Type	CC Type
Rock Shores - <i>Rock</i> - characterized by a lack of classic sediments such as gravel or sand.	Sediment Shores Types - <i>Sediment</i> - 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) Rock and Sediment Shores Types - <i>rock and pockets of classic sediments</i>	26) Sand and Gravel Flat or Fan, Narrow
7) Beach with Gravel Beach, Wide	27) Sand Beach, Wide
8) Platform with Gravel Beach, Wide	28) Mud Flat
9) Cliff with Gravel Beach	29) Mud Flat, Narrow
10) Beach with Gravel Beach, Narrow	30) Sand Beach, Narrow
11) Platform with Gravel Beach, Narrow	31) Estuary
12) Beach with Sand and Gravel Beach, Wide	32) Man-made, permeable
13) Platform with Sand and Gravel Beach, Wide	33) Man-made, impermeable
14) Cliff with Sand and Gravel Beach	34) Channel
15) Beach with Sand and Gravel Beach, Narrow	35) Tidal Lagoon
16) Platform with Sand and Gravel Beach, Narrow	
17) Cliff with Sand Beach, Wide	
18) Cliff with Sand Beach	
19) Platform 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 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 WCVL GOES WITH BIO\_AREAS WCVL SCVL WCVL NCVI, J4F  
 Habitat Classification for "Exposure Bio" (EXP\_BIO) and "Habitat Observed" (HAB\_OBS) based on visible macro-biota assemblages for the West Coast Vancouver Island Bio-mapping.

MAJOR SUBSTRATE	BEDROCK/BOULDER	BEDROCK/BOULDER	BEDROCK/BOULDER	BEDROCK/BOULDER	SAND & GRAVEL	SAND & GRAVEL	SAND/MUD	SEDIMENT	BEDROCK OR SEDIMENT
COASTAL CLASSES	1-20	1-20	1-23, 32, 33	1-23, 33	24, 25, 26, 32	24, 25, 26, 32	27, 28, 29, 30, 31	24 - 30	
EXPOSURE (EXP_BIO)	E	SE	SP	P, VP	SP	P, VP	SP, P, VP	SE, E	VE, P, SP
HABITAT OBSERVED (HAB_OBS)	2	3 *	4	5	6	7	8	9	10
upper	<i>Fenestrata</i>	<i>Fenestrata</i>	<i>Fenestrata</i>	<i>Fenestrata</i>	<i>Fenestrata</i>	<i>Fenestrata</i>	<i>marsh grasses &amp; rocks</i>		
middle	<i>Balanus glandula</i>	<i>Sabella spaldingii</i>	100 current dominant may be a <i>Porolithothamnion</i> but shows an assemblage of indicator species from higher wave exposure.						
middle	<i>Mytilus californianus</i>	<i>Mytilus californianus</i>	no visible macrobiota in no visible mobility						
lower	<i>Laminaria setchellii</i>	<i>Laminaria setchellii</i>							
middle	<i>Enteromorpha flexilis</i>	<i>Enteromorpha flexilis</i>							
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