



**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



# 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.

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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,

To determine the habitat type, the biomapper looks at the along-shore units as designated and described by the physical mapper,  
1.□ records the observations of the biobands in the unit and looks for indicator species,  
2.□ assigns a bio-(wave) exposure category,

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

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 bioblanks observed

- the biobands observed,
- the wave exposure as indicated by the bands, and
- the substrate types in the unit.

- the substrate types in the unit.

Legend Definitions  
CC - Coastal Classification number

Wave Exposure  
T. T. H. Chang et al.

E - Exposed - Very high wave exposure, open ocean swellsm usually fetches >500km  
VE - Very Exposed - Extreme high wave exposure

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 100km  
P - Protected - Low wave exposure, sheltered inlets, usually fetches less than 10km

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

VI - Very Protected - very low wave exposure, fetches < 1KM, sheltered anchorages at heads of bays and inlets

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.									
SOIL 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	VP, P, SP
HABITAT OBSERVED (HAB_OBS)	2	3 *	4	5	6	7	8	9	10
upper	<i>Verrucaria</i>	<i>Verrucaria</i>	<i>Verrucaria</i>	<i>Verrucaria</i>	<i>Verrucaria</i>	<i>Verrucaria</i>	marsh grasses & rushes		
	<i>Enteromorpha</i>	<i>Enteromorpha</i>	<i>Enteromorpha</i>	<i>Enteromorpha</i>	<i>Enteromorpha</i>	<i>Enteromorpha</i>			
	<i>Balanus glandula</i>	<i>Balanus glandula</i>	<i>Balanus glandula</i>	<i>Balanus glandula</i>	<i>Balanus glandula</i>	<i>Balanus glandula</i>	<i>Salicornia virginica</i>		
	<i>Peltvetiopsis limitata</i>	<i>Fucus distichus</i>	<i>Fucus distichus</i>	<i>Fucus distichus</i>	<i>Fucus distichus</i>	<i>Fucus distichus</i>	<i>Balanus glandula</i>		
middle	<i>Semibalanus cariosus</i>	<i>Semibalanus cariosus</i>	<i>Semibalanus cariosus</i>		<i>Semibalanus cariosus</i>				
	<i>Pollicipes polymerus</i>		<i>Mytilus trossulus</i>						
	<i>Mytilus californianus</i>	<i>Mytilus californianus</i>		<i>Ulva/ Ulvaria spp.</i>	<i>Ulva/ Ulvaria spp.</i>	<i>Ulva/ Ulvaria spp.</i>	<i>Ulva/ Ulvaria spp.</i>	<i>Ulva/ Ulvaria spp.</i>	
mid/low		<i>Microcladia/Iridaea type mixed reds</i>	<i>Gigartina/Odonthalia type mixed reds</i>						
	<i>Postelsia palmaeformis</i>								
		<i>Hedophyllum sessile</i>							
		<i>Codium fragile</i>	<i>Codium fragile</i>		<i>Codium fragile</i>				
lower	<i>Lessoniopsis littoralis</i>		<i>Laminaria saccharina</i>	<i>Laminaria saccharina</i>	<i>Laminaria saccharina</i>	<i>Laminaria saccharina</i>			
		<i>Egregia menziesii</i>							
	<i>Laminaria setchellii</i>	<i>Laminaria setchellii</i>							
		<i>Laminaria groenlandica</i>	<i>Laminaria groenlandica</i>		<i>Laminaria groenlandica</i>				
	<i>Alaria nana</i>	<i>Alaria marginata</i>	<i>Alaria marginata</i>		<i>Alaria marginata</i>				
		<i>Eisenia arborea</i>							
	<i>Lithothamnion</i>	<i>Lithothamnion</i>	<i>Lithothamnion</i>		<i>Lithothamnion</i>				
			<i>Sargassum muticum</i>		<i>Sargassum muticum</i>				
		<i>Agarum sp</i>	<i>Agarum sp</i>	<i>Agarum sp</i>	<i>Agarum sp</i>	<i>Agarum sp</i>			
		<i>Phyllospadix scouleri</i>							
subtidal		<i>Macrocystis integrifolia</i>	<i>Macrocystis integrifolia</i>	<i>Macrocystis integrifolia</i>	<i>Macrocystis integrifolia</i>	<i>Macrocystis integrifolia</i>			
	<i>Nereocystis luetkeana</i>	<i>Nereocystis luetkeana</i>	<i>Nereocystis luetkeana</i>		<i>Nereocystis luetkeana</i>				
		<i>Strongylocentrotus</i>	<i>Strongylocentrotus</i>		<i>Strongylocentrotus</i>				

