



# 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 habitat types and distance from shore, as well as the presence of specific species.

biobands and indicator species present at a bedrock shoreline with no mobile sediment present.

How is Habitat Type determined?  
Each Habitat Type has its own unique characteristics (e.g., soil type, water availability, temperature, etc.)

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

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.

- 2.□assigns a bio-(wave) exposure category,
- 3.□reviews the physical mapped information, and

3.  reviews the physical mapped information; and  
4.  assigns the Habitat Type that best describes the unit.

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The Habitat Type is based on the whole unit and is similar to the physical mapper's 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 wave exposure as indicated by the bands, and
- the substrate types in the unit.

Legend Definitions

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CC - Coastal Classification number

Wave Exposure

**Wave Exposure**  
E - Exposed - Very high wave exposure, open ocean swellsm usually fetches >500km

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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

SE - Semi Exposed - High wave exposure, open shorelines, areas between fully exposed and more sheltered, usually fetches 50 to 50km  
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, sheltered inlets, usually fetches less than 10km

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	IMMOBILE SUBSTRATES				MOBILE OR PARTIALLY MOBILE SUBSTRATES				CURRENT-DOMINATED	TIDAL LAGOON
	MAJOR SUBSTRATE	BEDROCK	BEDROCK/BOULDER	BEDROCK/GRAVEL	BEDROCK/GRAVEL	SAND & GRAVEL	SAND & GRAVEL	SAND/MUD	SEDIMENT	
COASTAL CLASSES	1-20	1-23, 32, 33	1-23, 33	1-23, 33	1-23, 33	24 – 30, 32 no SAL band	24 – 30, 32 no SAL band	24 – 30, 31 has SAL band	24-30	34 35
EXPOSURE (EXP BIO)	E	SE	SP	VP, P	SP	VP, P	VP, P, SP	SE, E	VP, P, SP	VP, P, SP
COMMUNITY CODE (HAB OBS)	2	3	4	5	6	7	8	9	10	11
upper	<i>Verrucaria</i> <i>Enteromorpha</i>	<i>Verrucaria</i> <i>Enteromorpha</i>	<i>Verrucaria</i> <i>Enteromorpha</i>	<i>Verrucaria</i> <i>Enteromorpha</i>	<i>Verrucaria</i> <i>Enteromorpha</i>	<i>Verrucaria</i> <i>Enteromorpha</i>	grasses & rushes <i>Salicornia virginica</i>	no visible macrobiota due to sediment mobility	tidal current dominated; may be a Protected wave exposure but shows an assemblage of indicator species from higher wave exposures. Assemblage observed is 'anomalous' for the wave energy of the site.	<i>Balanus glandula</i> <i>Fucus distichus</i>  ponded water in lagoon creates narrow intertidal and a reduced biota in brackish water, may have associated current dominated at outflow
	<i>Balanus glandula</i> <i>Fucus distichus</i>	<i>Balanus glandula</i> <i>Fucus distichus</i>	<i>Balanus glandula</i> <i>Fucus distichus</i>	<i>Balanus glandula</i> <i>Fucus distichus</i>	<i>Balanus glandula</i> <i>Fucus distichus</i>	<i>Balanus glandula</i> <i>Fucus distichus</i>	<i>Balanus glandula</i> <i>Fucus distichus</i>			
middle	<i>Pollipices polymerus</i> <i>Mytilus californianus</i>	<i>Mytilus californianus</i>	<i>Mytilus trossulus</i> * <i>Semibalanus cariosus</i>	<i>Mytilus trossulus</i> * <i>Semibalanus cariosus</i>	<i>Semibalanus cariosus</i>	<i>Ulva/ Ulvaria spp.</i>	<i>Ulva/ Ulvaria spp.</i>	<i>Mytilus trossulus</i> *		
	<i>Hedophyllum sessile</i> <i>Alaria 'nana' morph</i>									
mid/low	<i>Phyllospadix scouleri</i>									
lower	<i>Lessoniopsis littoralis</i>		<i>Laminaria groenlandica</i> <i>Laminaria saccharina</i> <i>Alaria 'marginata' morph</i>	<i>Laminaria saccharina</i>	<i>Laminaria groenlandica</i> <i>Laminaria saccharina</i> <i>Alaria 'marginata' morph</i>	<i>Laminaria groenlandica</i> <i>Laminaria saccharina</i> <i>Alaria 'marginata' morph</i>	<i>Laminaria saccharina</i>			
	<i>Lithothamnion</i>	<i>Lithothamnion</i>			<i>Lithothamnion</i>	<i>Lithothamnion</i>	<i>Lithothamnion</i>			
subtidal	<i>Nereocystis luetkeana</i>	<i>Nereocystis luetkeana</i>	<i>Macrocytis integrifolia</i> <i>Agarum spp.</i>	<i>Macrocytis integrifolia</i> <i>Agarum spp.</i>	<i>Macrocytis integrifolia</i> <i>Agarum spp.</i>	<i>Nereocystis luetkeana</i>	<i>Macrocytis integrifolia</i> <i>Agarum spp.</i>			
	<i>Strongylocentrotus franciscanus</i>		<i>Strongylocentrotus franciscanus</i>			<i>Strongylocentrotus franciscanus</i>				

