103O.040

103P.031

103P.021

103O.030

103P.011

103O.020

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 shore 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.

The 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 swellim 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

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 - P/VP

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

Tidal Lagoon

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

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

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 IC 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	BEDROCK OR SEDIMENT	BEDROCK OR SEDIMENT
COASTAL CLASSES	1-20	1-23, 32, 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 (DEF 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	Fucus gardneri / Balanus glandula	Fucus gardneri / Enteromorpha / Balanus glandula	Fucus gardneri / Enteromorpha / Balanus glandula	Fucus gardneri / Enteromorpha / Balanus glandula / Fucus distichus	Fucus gardneri / Enteromorpha / Balanus glandula / Fucus distichus	Fucus gardneri / Enteromorpha / Balanus glandula / Fucus distichus	grasses & rushes / Salicornia virginica / Balanus glandula	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.	Balanus glandula / Fucus distichus
middle	Pollicipes polymerus / Semibalanus cariosus	Mytilus californianus / Semibalanus cariosus	Mytilus californianus / Mytilus trossulus* / Semibalanus cariosus / Ulva/ Ulvaria spp.	Mytilus trossulus * / Ulva/ Ulvaria spp.	Semibalanus cariosus / Ulva/ Ulvaria spp.	Mytilus trossulus* / Ulva/ Ulvaria spp.	Ulva/ Ulvaria			
midlow	Alaria 'nana' morph	Halosaccion glandiforme	Hedophyllum sessile / Phyllospadix scouleri							
lower	Lessoniopsis littoralis / Lithothamnion	Alaria 'marginata' morph / Lithothamnion	Laminaria groenlandica / Laminaria saccharina / Alaria 'marginata' morph / Lithothamnion	Laminaria saccharina	Laminaria groenlandica / Laminaria saccharina / Alaria 'marginata' morph / Lithothamnion	Laminaria saccharina		ponded water in lagoon creates narrow intertidal and subtidal biota in brackish water, may have associated current dominated at outflow	
subtidal	Nereocystis luetkeana	Nereocystis luetkeana / Macrocystis integrifolia / Agarum spp. / Strongylocentrotus franciscanus / Zostera marina	Nereocystis luetkeana / Macrocystis integrifolia / Agarum spp. / Strongylocentrotus franciscanus / Zostera marina	Macrocystis integrifolia / Agarum spp. / Zostera marina	Nereocystis luetkeana / Macrocystis integrifolia / Agarum spp. / Strongylocentrotus franciscanus / Zostera marina	Macrocystis integrifolia / Agarum spp. / Zostera marina			