



| 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 | |
| | 12 - Tidal Lagoon |
| CC Type | |
| Rock Shore Types - characterized by a lack of clastic sediments such as gravel or sand. | Sediment Shore Types - 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) Beach with Gravel Beach, Wide | 26) Sand and Gravel Flat or Fan, Narrow |
| 7) Platform with Gravel Beach, Wide | 27) Sand Beach, Wide |
| 8) Cliff with Gravel Beach | 28) Sand Flat |
| 9) Beach with Gravel Beach, Narrow | 29) Mud Flat |
| 10) Platform with Gravel Beach, Narrow | 30) Sand Beach, Narrow |
| 11) Beach with Sand and Gravel Beach, Wide | 31) Cliffs |
| 12) Platform with Sand and Gravel Beach, Wide | 32) Man-made, permeable |
| 13) Cliff with Sand and Gravel Beach | 33) Man-made, impermeable |
| 14) Beach with Sand and Gravel Beach, Narrow | 34) Channel |
| 15) Platform with Sand and Gravel Beach, Narrow | 35) Tidal Lagoon |
| 16) Beach with Sand Beach, Wide | |
| 17) Platform with Sand Beach, Wide | |
| 18) Cliff with Sand Beach | |
| 19) Beach 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 map, 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 COASTAL CLASSES EXPOSURE (OBS-OBS) COMMUNITY CODE (HAB-OBS) | IMMOBILE SUBSTRATES | | | | MOBILE OR PARTIALLY MOBILE SUBSTRATES | | | | CURRENT-DOMINANT NATED | TIDAL LAGOON BEDROCK OR SEDIMENT |
|---|--|--|--|--|--|--|--|--|--|--|
| | BEDROCK | BEDROCK/BOULDER | BEDROCK/GRAVEL | BEDROCK/GRAVEL | SAND & GRAVEL | SAND & GRAVEL | SAND/MUD | SEDIMENT | | |
| 1-20 | 1-23, 32, 33 | 1-23, 33 | 1-23, 33 | 1-23, 33 | 24-30, 32 | 24-30, 32 | 24-30, 32 | 24-30, 32 | 34 | 35 |
| E | SE | SE | SP | VP, P | no SAL band | no SAL band | VP, P | VP, P, SP | VP, P, SP | VP, P, SP |
| 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | |
| upper | <i>Verrucaria</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> | <i>Enteromorpha</i> <i>Enteromorpha</i> | <i>Enteromorpha</i> <i>Enteromorpha</i> | <i>Enteromorpha</i> <i>Enteromorpha</i> | <i>Enteromorpha</i> <i>Enteromorpha</i> |
| middle | <i>Balanus glandula</i> <i>Mytilus californianus</i> <i>Semibalanus cariosus</i> | <i>Balanus glandula</i> <i>Mytilus californianus</i> <i>Semibalanus cariosus</i> | <i>Balanus glandula</i> <i>Mytilus californianus</i> <i>Semibalanus cariosus</i> | <i>Balanus glandula</i> <i>Mytilus californianus</i> <i>Semibalanus cariosus</i> | <i>Balanus glandula</i> <i>Mytilus californianus</i> <i>Semibalanus cariosus</i> | <i>Balanus glandula</i> <i>Mytilus californianus</i> <i>Semibalanus cariosus</i> | <i>Balanus glandula</i> <i>Mytilus californianus</i> <i>Semibalanus cariosus</i> | <i>Balanus glandula</i> <i>Mytilus californianus</i> <i>Semibalanus cariosus</i> | <i>Balanus glandula</i> <i>Mytilus californianus</i> <i>Semibalanus cariosus</i> | <i>Balanus glandula</i> <i>Mytilus californianus</i> <i>Semibalanus cariosus</i> |
| mid/low | <i>Alaria 'vase' morph</i> | <i>Hydrophyllum scutell</i> | <i>Hydrophyllum scutell</i> | <i>Hydrophyllum scutell</i> | <i>Alaria 'vase' morph</i> | <i>Alaria 'vase' morph</i> | <i>Alaria 'vase' morph</i> | <i>Alaria 'vase' morph</i> | <i>Alaria 'vase' morph</i> | <i>Alaria 'vase' morph</i> |
| lower | <i>Laminaria digitata</i> | <i>Laminaria digitata</i> | <i>Laminaria digitata</i> | <i>Laminaria digitata</i> | <i>Laminaria digitata</i> | <i>Laminaria digitata</i> | <i>Laminaria digitata</i> | <i>Laminaria digitata</i> | <i>Laminaria digitata</i> | <i>Laminaria digitata</i> |
| subtidal | <i>Nereocystis lachnana</i> | <i>Nereocystis lachnana</i> | <i>Nereocystis lachnana</i> | <i>Nereocystis lachnana</i> | <i>Nereocystis lachnana</i> | <i>Nereocystis lachnana</i> | <i>Nereocystis lachnana</i> | <i>Nereocystis lachnana</i> | <i>Nereocystis lachnana</i> | <i>Nereocystis lachnana</i> |

