

Unit Break Points	Mobile/Partially Mobile Substrates
Undefined	6 - Sand & Gravel - CC 24-26, 32 - SP
<b>Immobile Substrates</b>	7 - Sand & Gravel - CC 24-26, 32 - VP/P
1 - Bedrock - CC 1-20 - VE	8 - Estuary or Sand/Mud - CC 27-31 - VP/P/SP
2 - Bedrock - CC 1-20 - E	9 - Sediment - CC 21 - 30 - SE/E
3 - Bedrock/Boulder - CC 1-23, 32, 33 - SE	<b>Current Dominated</b>
4 - Bedrock/Gravel - CC 1-23, 33 - SP	10 - Bedrock or Sediment - CC 34 - VP/P/SP
5 - Bedrock/Gravel - CC 1-23, 33 - P/P/P	

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

0 Sediment CC 21 20 SE/5

9 - Sediment - CC 21 - 30 - SE/E

### Current Dominated

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

CC	Type	CC	Type
<b>Beach Shores Types, characterized by a lack of classic sediments such as gravel or sand.</b>		<b>Beach Shores Types, have substrates that have little or no bedrock cropping out.</b>	
1	Black Beach, Wide	23	Gravel Flat, Wide
2	Black Platform, Wide	24	Gravel Beach
3	Black Cliff, Narrow	25	Gravel Flat, Fan
4	Black Beach, Narrow	26	Sand and Gravel Flat or Fan, Wide
5	Black Platform, Narrow	27	Sand and Gravel Flat or Fan, Narrow
<b>Beach and Seafloor Shores Types, rock and pebbles of classic sediments</b>		28	Gravel Beach, Wide
6	Platform with Gravel Beach, Wide	29	Sand Flat
8	Cliff with Gravel Beach	30	Gravel Flat
9	Platform with Gravel Beach, Narrow	31	Gravel Beach, Narrow
10	Platform with Gravel Beach, Narrow	32	Shoals
11	Platform with Sand and Gravel Beach, Wide	<b>Man-Made Materials</b>	
12	Platform with Sand and Gravel Beach, Wide	33	Stone-made, permeable
13	Cliff with Sand and Gravel Beach	34	Man-made, impermeable
14	Platform with Sand and Gravel Beach, Narrow	<b>Current dominated</b>	
15	Platform with Sand and Gravel Beach, Narrow	35	Flats
16	Platform with Sand Beach, Wide	36	Flats
17	Platform with Sand Beach, Wide	37	Long Lagoon
18	Cliff with Sand Beach		
19	Platform with Sand Beach, Narrow		
20	Platform with Sand Beach, Narrow		

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 biopanner 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 life-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 below fully exposed and more sheltered, usually fetches 50 to 500 P - Protected - Low wave exposure, sheltered inlets, usually fetches less than 10km

M - 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 QC/GH. Original spp/hab table from Gwaii Haanas											
Habitat Classification Based on Visible Macro-Biota Assemblages for the Queen Charlotte shoreline											
SUBSTRATE STABILITY	IMMOBILE SUBSTRATES						MOBILE OR PARTIALLY MOBILE SUBSTRATES				CURRENT DOMINANT SPECIES
	REDWOOD	REDWOOD	REDWOOD/BALDIE	REDWOOD/GRAVEL	REDWOOD/GRAVEL	SAND & GRAVEL	SAND & GRAVEL	SEDIMENTARY SAND/MUD	SEDIMENT		
COASTAL CLASSES	1-20	1-20	1-23, 32, 33	1-23, 33	1-23, 33	24, 25, 26, 32	24, 25, 26, 32	27, 28, 29, 30, 31	21-30	34	
EXPOSURE	VE	SE	SE	SP	VP, P	S	VP, P	VP, P, SP	SE, E	VP, P, SP	
COMMUNITY CODE	1	2	3	4	5	6	7	8	9	10	
spp:	<i>Fernaria</i>	<i>Fernaria</i>	<i>Fernaria</i>	<i>Fernaria</i>	<i>Fernaria</i>	<i>Fernaria</i>	<i>Fernaria</i>	<i>Fernaria</i>	<i>Fernaria</i>	<i>Fernaria</i>	
middle	<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>Balanus glandula</i>	<i>Balanus glandula</i>	<i>Balanus glandula</i>	<i>Balanus glandula</i>	
	<i>Polysiphonia confertissima</i>	<i>Polysiphonia confertissima</i>	<i>Polysiphonia confertissima</i>	<i>Polysiphonia confertissima</i>	<i>Polysiphonia confertissima</i>	<i>Polysiphonia confertissima</i>	<i>Polysiphonia confertissima</i>	<i>Polysiphonia confertissima</i>	<i>Polysiphonia confertissima</i>	<i>Polysiphonia confertissima</i>	
mid-low	<i>Alaria nana</i>	<i>Alaria nana</i>	<i>Alaria nana</i>	<i>Alaria nana</i>	<i>Alaria nana</i>	<i>Alaria nana</i>	<i>Alaria nana</i>	<i>Alaria nana</i>	<i>Alaria nana</i>	<i>Alaria nana</i>	
lower	<i>Laminaria saccharina</i>	<i>Laminaria saccharina</i>	<i>Laminaria saccharina</i>	<i>Laminaria saccharina</i>	<i>Laminaria saccharina</i>	<i>Laminaria saccharina</i>	<i>Laminaria saccharina</i>	<i>Laminaria saccharina</i>	<i>Laminaria saccharina</i>	<i>Laminaria saccharina</i>	
mid-high	<i>Enteromorpha flexilis</i>	<i>Enteromorpha flexilis</i>	<i>Enteromorpha flexilis</i>	<i>Enteromorpha flexilis</i>	<i>Enteromorpha flexilis</i>	<i>Enteromorpha flexilis</i>	<i>Enteromorpha flexilis</i>	<i>Enteromorpha flexilis</i>	<i>Enteromorpha flexilis</i>	<i>Enteromorpha flexilis</i>	
high	<i>Enteromorpha flexilis</i>	<i>Enteromorpha flexilis</i>	<i>Enteromorpha flexilis</i>	<i>Enteromorpha flexilis</i>	<i>Enteromorpha flexilis</i>	<i>Enteromorpha flexilis</i>	<i>Enteromorpha flexilis</i>	<i>Enteromorpha flexilis</i>	<i>Enteromorpha flexilis</i>	<i>Enteromorpha flexilis</i>	

\* Including diadema diagnostic species used to distinguish "communities". Square brackets [ ] indicate species at VII-AD, ORS - which may be present but in reduced abundance and size. Note that the absence of species assemblages are as diagnostic as species' presence. Community Code 1 (VE) - very exposed occurs only on the southwest coast of M'Clary Bay.

\* Bolding indicates diagnostic species used to distinguish "communities". Square brackets [ ] enclose species at VE AB\_OBS 1 which may be present but are in reduced abundance and size. Note that the absence of species assemblages are as diagnostic as species' presence. Community Code type 1 (VE – very exposed) occurs only on the southwest coast of Moresby Island.

