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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 W 0 0.25 0.5 Kilometers Legend Mobile/Partially Mobile Substrates Unit Break Points 6 - Sand & Gravel - CC 24-26, 32 -SP Undefined 7 - Sand & Gravel - CC 24-26,32 - VP/P Immobile Substrates 8 - Estuary or Sand/Mud - CC 27-31 - VP/P/SP features. 1 - Bedrock - CC 1-20 - VE ✓ 9 - Sediment - CC 21 - 30 - SE/E 2 - Bedrock - CC 1-20 - E 3 - Bedrock/Boulder - CC 1-23, 32, 33 - SE **Current Dominated** How is Habitat Type determined? 10 - Bedrock or Sediment - CC 34 - VP/P/SP 4 - Bedrock/Gravel - CC 1-23, 33 - SP 5 - Bedrock/Gravel - CC 1-23,33 - P/VP 2.□assigns a bio-(wave) exposure category, 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 bedcrock cropping out 21 Gravel Flat, Wide 22 Gravel Beach 23 Gravel Flat or Fan 24 Sand and Gravel Flat or Fan, Wide 25 Sand and Gravel Beach 26 Sand and Gravel Beach Rock Ramp, Wide 1 Rock Ramp, Wide 2 Rock Platform Wide 3 Rock Cliff Narrow 4 Rock Ramp, Narrow 5 Rock Platform Narrow 26 Sand and Gravel Flat or Fan, Narrow 27 Sand Beach, Wide Rock and Sediment Shore Types - rock and pockets of clastic sediments • the biobands observed, 6 Ramp with Gravel Beach, Wide 7 Platform with Gravel Beach, Wide 28 Sand Flat • the substrate types in the unit. 29 Mud Flat 30 Sand Beach, Narrow 31 Estuaries Man-Made Materials 32 33 Man-made, permeable 33 Man-made, impermeable Current Dominated 20 8 Cliff with Gravel Beach 9 Ramp with Gravel Beach, Narrow 10 Platform with Gravel Beach, Narrow 11 Ramp with Sand and Gravel Beach, Wide 12 Platform with Sand and Gravel Beach, Wide _____ Legend Definitions CC - Coastal Classification number 12 Platform with Sand and Gravel Beach, Wide 12 Platform with Sand and Gravel Be 13 Cliff with Sand and Gravel Beach Wave Exposure 14 Ramp with Sand and Gravel Beach, Narrow Current Dominated 15 Platform with Sand and Gravel Beach, Narrow 16 Ramp with Sand Beach, Wide 17 Platform with Sand Beach, Wide 18 Cliff with Sand Beach 19 Ramp with Sand Beach, Narrow 20 Platform with Sand Beach, Narrow 34 Channel 35 Tidal Lagoon

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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 biologial and geomorphological 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 indictor species present at a bedrock shoreline with no mobile sediment present.

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,

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.

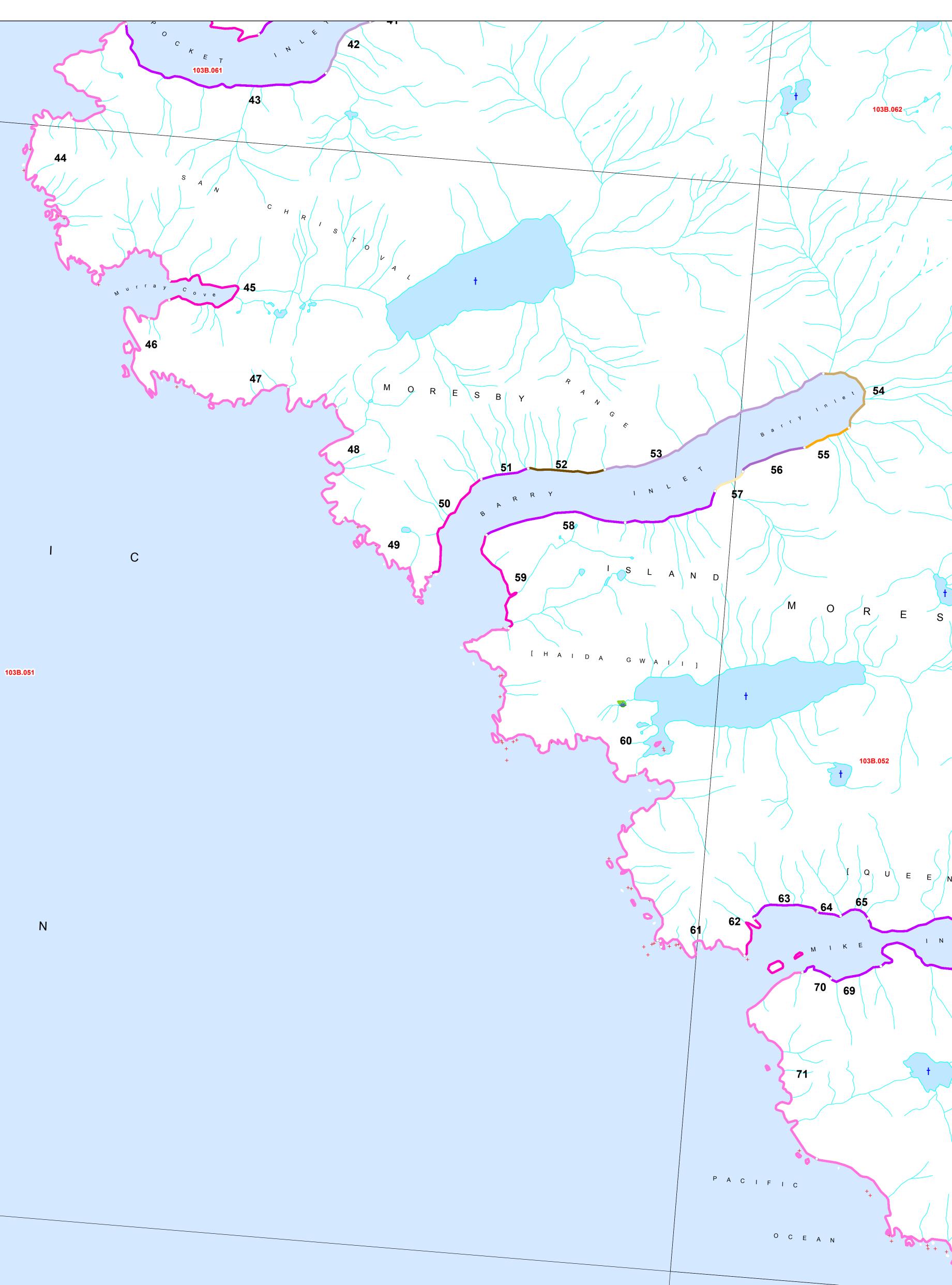
Habitat Type is a summary of the biophysical classification of the whole shore unit, based on:

• The wave exposure as indicated by the bands, and

E - Exposed - Very high wave exposure, open ocean swellsm 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 expsoure, sheltered inlets, usually fetches less than 10km SP - Semi Protected - Moderate wave expsoure, partly sheltered, usually fetches 10-50km VP - Very Protected - Very low wave exposure, fethces < 1km, sheltered anchorages at heads of bays and inletes

Table QCI/GH. Original spp/hab table from Gwaii Haa Habitat Classification Based on Visible Macro-Biota / SUBSTRATE STABILITY MAJOR SUBSTRATE IMMOBILE SUBST BEDROCK BEDROCK/BOULDER BEDROCK COASTAL CLASSES 1-20 1-23, 32, 33 1-20 EXPOSURE (EXP BIO) COMMUNITY CODE (HAB_OBS) VE E SE 2 3 upper 'errucaria Vernucaria Enteromorpha Balanus glandula Balanus glandula Balamıs giandula Fucus distichus middle **Pollicipes polymerus** Pollicipes polymerus Mytilus californianus Mytilus californianus Mytilus californianus [Semibalanus carriosus] Semibalanus carriosus Semibalanus carriosus mid/low Halosaccion glandiforme Hedophyllum sessile Alaria 'nana' morph] Alaria 'nana' morph Codium fragile Phyllospadix scouleri Egregia menziesii lower ssoniopsis littoralis Lessoniopsis littoralis Laminaria setchelli minaria setchelli] Laminaria setchelli lush foliose coralline foliose coralline reds Laminaria groenlandica diverse mixed red algae reds: Bossiella/ Calliarthron/Corallina Alaria 'marginata'morph hothannion Lithothamnion Lithothamnion subtidal reocystis luetkeana Nereocystis luetkeana Nereocystis luetkeana Macrocystis integrifolia Agarum spp. Strongylocentrotus franciscanus * 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.



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Assemblages for the Queen Charlotte shoreline						
		MOBILE OR PARTIALLY MOBILE				CURRENT-
DATES		SUBSTRATES				DOMI-
RATES						NATED
BEDROCK/GRAVEL	BEDROCK/GRAVEL	SAND & GRAVEL	SAND & GRAVEL	ESTUARY or SAND/MUD	SEDIMENT	BEDROCK OR SEDIMENT
				27, 28, 29, 30,		
1-23, 33	1-23, 33	24, 25, 26, 32	24, 25, 26, 32	31	21-30	34
SP	VP, P	SP	VP, P	VP, P, SP	SE, E	VP, P, SP
4	5	6	7	8	9	10
Vernicaria	Verrucaria	Verrucaria	Verrucaria	grasses & rushes		
Enteromorpha	Enteromorpha	Enteromorpha	Enteromorpha	Salicornia virginica		
Balanus glandula	Balanus glandula	Balanus glandula	Balanus glandula	Balanus glandula		tidal current
Fucus distichus	Fucus distichus	Fucus distichus	Fucus distichus	Fucus distichus		dominated; may
						be a protected wave exposure
Mytilus trossulus	Mytilus trossulus	Mytilus trossulus	Mytilus trossulus	Mytilus trossulus		but shows an
Semibalanus carriosus		Semibalanus carriosus				assemblage of
Ulva/ Ulvaria spp.	Ulva/ Ulvaria spp.	Ulva/ Ulvaria spp.	Ulva/Ulvaria spp.	Ulva/ Ulvaria	no visible intertidal	indicator species from higher
Halosaccion glandiforme	Halosaccion glandiforme	Halosaccion glandiforme	Halosaccion glandiforme		macrobiota	wave exposures.
					due to	
Codium fragile		Codium fragile			sediment	Assemblage
					mobility	observed is 'anomalous' for
						the wave energy
						of the site.
Laminaria groenlandica		Laminaria groenlandica				
Laminaria saccharina	Laminaria saccharina	Laminaria saccharina	Laminaria saccharina			
Alaria 'marginata'morph		Alaria 'marginata'morph				
Lithothamnion		Lithothamnion				
Nereocystis luetkeana		Nereocystis luetkeana				
Macrocystis integrifolia	Macrocystis integrifolia	Macrocystis integrifolia	Macrocystis integrifolia			
Agarum spp. Strongylocentrotus	Agarum spp.	Agarum spp. Strongylocentrotus	Agarum spp.			
franciscanus		franciscanus				
Zostera marina	Zostera marina	Zostera marina	Zostera marina	Zostera marina		



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