103F.017

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 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** 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 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 1 Rock Ramp, Wide 21 Gravel Elst, Wide A lock Shore Types - characterized by a fack of clastic sediments soch as gra A Rock Ramp, Wide Rock Cliff Narrow A Rock Ramp, Narrow S Rock Platform Narrow Rock and Sediment Shore Types - rock and pockets of clastic sediments G Ramp with Gravel Beach. Wide 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 6 Ramp with Gravel Beach, Wide

26 Sand and Gravel Flat or Fan, Narrow 27 Sand Beach, Wide 28 Sand Flat 7 Platform with Gravel Beach, Wide 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 13 Cliff with Sand and Gravel Beach 14 Ramp with Sand and Gravel Beach, Narrow 15 Platform with Sand and Gravel Beach, Narrow
 29
 Mud Flat

 30
 Sand Beach, Narrow

 31
 Estuaries

 Man-Made Materials
 32

 33
 Man-made, permeable

 33
 Man-made, impermeable

 Current Dominated
 20
 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

features.

How is Habitat Type determined?

• the biobands observed, • the substrate types in the unit.

Wave Exposure

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Marble Rock

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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,

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 wave exposure as indicated by the bands, and

Legend Definitions CC - Coastal Classification number

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 A

SUBSTRATE STABILITY		IMMO	BILE SUBST
MAJOR SUBSTRATE	BEDROCK	BEDROCK	BEDROCK/BOULDER
COASTAL CLASSES	1-20	1-20	1-23, 32, 33
EXPOSURE (EXP BIO)	VE	E	SE
COMMUNITY CODE (HAB_OBS)	1	2	3
upper	Verrucaria	Vernucaria	Verrucaria Enteromorpha
	Balanus glandula	Balanus giandula	Balanus glandula Fucus distichus
middle	Pollicipes polymerus Mytilus californianus	Pollicipes polymerus Mytilus californianus	Mytilus californianus
	[Semibalanus carriosus]	Semibalanus carriosus	Semibalanus carriosus
mid/low	[Alaria 'nana' morph]	Alaria 'nana' morph	Halosaccion glandiforme Hedophyllum sessile Codium fragile Phyllospadix scouleri Fareoia mentiesii
lower	Lessoniopsis littoralis [Laminaria setchelli] Iush foliose coralline reds: Bossiella/ Calliarthron/Corallina	<i>Lessoniopsis littoralis</i> <i>Laminaria setchelli</i> foliose coralline reds	Laminaria setchelli Laminaria groenlandica diverse mixed red algae Alaria 'marginata' morph
subtidal	Lithothannion Nereocystis luetkeana	Lithothannion Nereocystis luetkeana	Lithothammion Nereocystis luetkeana Macrocystis integrifolia Agarum spp. Strongylocentrotus franciscanus



aanas Assemblages for the Queen Charlotte shoreline								
RATES		MOBILE OR PARTIALLY MOBILE SUBSTRATES				CURRENT- DOMI- NATED		
BEDROCK/GRAVEL	BEDROCK/GRAVEL	SAND & GRAVEL	SAND & GRAVEL	ESTUARY or SAND/MUD	SEDIMENT	BEDROCK OR SEDIMENT		
1-23, 33	1-23, 33	24, 25, 26, 32	24, 25, 26, 32	27, 28, 29, 30, 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		
Verrucaria Enteromorpha Balanus glandula Fucus distichus	Verrucaria Enteromorpha Balanus glandula Fucus distichus	Verrucaria Enteromorpha Balanus glandula Fucus distichus	Verrucaria Enteromorpha Balanus glandula Fucus distichus	grasses & rushes Salicornia virginica Balanus glandula Fucus distichus		tidal current dominated; may		
Mytilus trossulus Semibalanus carriosus Ulva/ Ulvaria spp.	Mytilus trossulus Ulva/Ulvaria spp.	Mytilus trossulus Semibalanus carriosus Ulva/ Ulvaria spp.	Mytilus trossulus Ulva/Ulvaria spp.	Mytilus trossulus Ulva/Ulvaria	no visible	be a protected wave exposure but shows an assemblage of indicator species		
Halosaccion glandiforme Codium fragile	Halosaccion glandiforme	Halosaccion glandiforme Codium fragile	Halosaccion glandiforme		intertidal macrobiota due to sediment mobility	from higher wave exposures. Assemblage observed is 'anomalous' for		
Laminaria groenlandica Laminaria saccharina Alaria 'marginata'morph Lithothamnion	Laminaria saccharina	Laminaria groenlandica Laminaria saccharina Alaria 'marginata'morph Lithothamnion	Laminaria saccharina			the wave energy of the site.		
Nereocystis linetkeana Macrocystis integrifolia Agarum 3pp. Strongylocentrotus franciscanus	Macrocystis integrifolia Agarum spp.	Nereocystis luetkeana Macrocystis integrifolia Agarum spp. Strongylocentrotus franciscanus	Macrocystis integrifolia Agarum spp.					
Zostera marina	Zostera marina	Zostera marina	Zostera marina	Zøstera marina				
e brackets [] enclose species at VE AB_OBS 1 which may be present but are in reduced abundance and size. Note that the absence of $VE = very$ exposed) occurs only on the southwest coast of Moresby Island								

