103A.046	



Base Information 1:20,000 GeoBC Terrain Resource Information Management (TRIM) Database 1:20,000 0 0.25 0.5 1 S L L L L L S Kilometers						
Legend						
<ul> <li>Unit Break Points</li> </ul>	Mobile/Partially Mobile Substrates					
Undefined	6 - Sand & Gravel - CC 24-26, 32 -SP					
Immobile Substrates	7 - Sand & Gravel - CC 24-26,32 - VP/P	The Habitat Type provides a simr				
1 - Bedrock - CC 1-20 - VE	8 - Estuary or Sand/Mud - CC 27-31 - VP/P/SP	been mapped. The Habitat Type features.				
2 - Bedrock - CC 1-20 - E	✓ 9 - Sediment - CC 21 - 30 - SE/E	Each Habitat Type has a definition Semi-exposed, Immobile substrat				
	Current Dominated	biobands and indictor species pre				
<ul> <li>4 - Bedrock/Gravel - CC 1-23, 33 - SP</li> <li>5 - Bedrock/Gravel - CC 1-23,33 - P/VP</li> </ul>	<ul> <li>10 - Bedrock or Sediment - CC 34 - VP/P/SP</li> <li>Tidal Lagoon</li> <li>11 - Bedrock or Sediment - CC 35 - VP/P/SP</li> </ul>	How is Habitat Type determined? Each Habitat Type has typical bio To determine the Habitat Type, th 1.□records the observations of th 2.□assigns a bio-(wave) exposure 3.□reviews the physical mapped				
СС Туре	СС Туре	4. assigns the Habitat Type that				
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 Flat, Wide	The Habitat Type is based on the				
3 Rock Cliff Narrow	22 Gravel Beach 23 Gravel Elator Fan	detailed across-shore data are su				
4 Rock Ramp, Narrow	24 Sand and Gravel Flat or Fan. Wide					
5 Rock Platform Narrow	25 Sand and Gravel Beach	Habitat Type is a summary of the				
Rock and Sediment Shore Types - rock and pockets of clastic sediments	26 Sand and Gravel Flat or Fan, Narrow	<ul> <li>□the biobands observed,</li> </ul>				
6 Ramp with Gravel Beach, Wide	27 Sand Beach, Wide	<ul> <li>The wave exposure as indicated</li> </ul>				
7 Platform with Gravel Beach, Wide	28 Sand Flat	<ul> <li>■the substrate types in the unit.</li> </ul>				
9 Ramp with Gravel Beach. Narrow	30 Sand Beach. Narrow					
10 Platform with Gravel Beach, Narrow	31 Estuaries	Legend Definitions				
11 Ramp with Sand and Gravel Beach, Wide	Man-Made Materials	CC - Coastal Classification numb				
12 Platform with Sand and Gravel Beach, Wide	32 Man-made, permeable					
13 Cliff with Sand and Gravel Beach	33 Man-made, Impermeable	Wave Exposure				
15 Platform with Sand and Gravel Beach, Narrow	34 Channel	E - Exposed - Very high wave exp				
16 Ramp with Sand Beach, Wide	35 Tidal Lagoon	VE - Very Exposed - Extreme high				
17 Platform with Sand Beach, Wide		SE - Semi Exposed - High wave e				
18 Cliff with Sand Beach		P - Protected - Low wave expsoul				
19 Ramp with Sand Beach, Narrow						
Zop latorni with Sand Beach, Natiow		VP - Very Protected - Very IOW Wa				

## **Shoreline Habitat**

ype provides a simplified picture of the "look" of the unit overall, based on the detailed biophysical attributes that have I. The Habitat Type category is a summary of the observations of both the unit's biologial and geomorphological Type has a definition that includes the typical substrate, wave exposure and biobands. For example, for the d, Immobile substrate Habitat Type, part of the definition of that class is a certain combination of the most likely indictor species present at a bedrock shoreline with no mobile sediment present.

t Type determined? Type has typical biological features (including both an indicator species list and typical associated biobands). the Habitat Type, the biomapper looks at the along-shore Units as designated and described by the physical mapper, and ne observations of the biobands in the unit and looks for indicator species,

bio-(wave) exposure category, ne physical mapped information, and ne Habitat Type that best describes the unit.

ype is based on the whole unit and is similar to the physical mappers use of the 'Coastal Class' category, in that the ss-shore data are summarized into one attribute. The simplified category describes the features of the whole unit.

s a summary of the biophysical classification of the whole shore unit, based on:

s observed, posure as indicated by the bands, and

tions Classification number

Very high wave exposure, open ocean swellsm usually fetches >500km
 bosed - 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 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 BC study area, from Johnstone Strait/Central Coast Mapping Regions 5, 6 and 7.										
SUBSTRATE STABILITY	IMMOBILE SUBSTRATES			MOBILE OR PARTIALLY MOBILE SUBSTRATES				CURRENT- DOMI- NATED	TIDAL IAGOON	
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 (EXP 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	Verrucaria Balanus glandula	Verrucaria Enteromorpha Balanus glandula Fucus distichus	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	no visible tidal current macrobiota dominated; may due to be a Protected sediment wave exposure mobility but shows an assemblage of	tidal current	Balanus glandula Fucus distichus ponded water in lagoon creates narrow intertidal and a reduced biota in brackish water, may haye
middle	Pollicipes polymerus Mytilus californianus Semibalanus carriosus	Mytilus californianus Semibalanus carriosus	Mytilus trossulus* Semibalanus carriosus Ubu/ Ubu <b>ria sp</b> p.	Mytilus trossulus * Uba/ Ubaria spp.	Semibalanus carriosus Ulva/ Ulvaria spp.	Ulva/ Ulvaria spp.	Mytilus trossulus" Ulva/ Ulvaria		dominated; may be a Protected wave exposure but shows an assemblage of	
mid/low	Alaria 'nana' morph	Hedophyllum sessile Phyllospadix scouleri	сни сниш <i>у</i> р.	essa essana spr.	ena ena app.	erw erwayp.	one onena		indicator species from higher wave exposures. Assemblage	
lower	Lessoniopsis littoralis Lithothamnion	Alaria 'marginata' morph Lithothamnion	Laminaria groenlandica <b>Laminaria saccharina</b> Alaria 'marginata' morph Lithothamnion	Laminaria saccharina	Laminaria groenlandica Laminaria saccharina Alaria 'marginata' morph Lithothamnion	Laminaria saccharina		observed is 'anomalous' for the wave energy of the site.		associated current dominated at outflow
subtidal	Nereocystis luetkeana	Nereocystis luetkeana Macrocystis integrifolla Agarum spp. Strongylocentrotus franciscanus	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	Zostera marina			



