		Butterworth Rocks (* (*)		
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 0 0.25 0.5 1 Kilometers		103J.016		
Legend Init 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 - P/VP Ecc Rock Ramp, Nide 2 Rock Platform Narrow 8 Rock Cliff Narrow 4 Rock Ramp, Nide 9 Ramp with Gravel Beach, Wide 9 Ramp with Gravel Beach, Wide 9 Ramp with Gravel Beach, Narrow 10 Platform with Sand and Gravel Beach, Narrow 12 Platform with Sand and Gravel Beach, Narrow 13 Cliff with Sand and Gravel Beach, Narrow 14 Ramp with Gravel Beach, Narrow 15 Platform with Sand and Gravel Beach, Narrow 16 Ramp with Sand and Gravel Beach, Narrow 17 Platform with Sand and Gravel Beach, Narrow 18 Ramp with Sand and Gravel Beach, Narrow 19 Ramp with Sand and Gravel Beach, Narrow 10 Platform with Sand and Gravel Beach, Narrow 12 Platform with Sand and Gravel Beach, Narrow 13 Cliff with Sand Beach, Wide 14 Ramp with Sand and Gravel Beach, Narrow 15 Platform with Sand Beach	Mobile/Partially Mobile Substrates	The Habitat Typp been mapped. T features. Each Habitat Typ Semi-exposed, I biobands and ind How is Habitat T Each Habitat Typ To determine the 1. records the o 2. assigns a bio 3. reviews the p 4. assigns the f The Habitat Typp detailed across- Habitat Type is a • The biobands • The wave exp • The substrate Legend Definitio CC - Coastal Cla Wave Exposure E - Exposed - W VE - Very Expos SE - Semi Expo P - Protected - L SP - Semi Prote VP - Very Protec		



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

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,

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

s observed, posure as indicated by the bands, and

ions

DIXON

Table MIDCO The Species/ v	OAST and NORTH C wave exposure/ subst	COAST project area w trate table for Habitat	which includes BIO_AF t Classification (HAB_C	REAS CC, JS and NC. DBS)., for the Mid-co	ast BC study area, fro	om Johnstone Strait/G	Central Coast Ma	pping Region	s 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)	Е	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 Eucus distichus	Verrucaria Enteromorpha Balanus glandula Fucus distichus	Verrucaria Enteromorpha Balanus glandula Fucus distichus	grasses & rushes Salicornia virginica Balcanus glandula Eucus distichus	no visible	tidal current	Balanus glandula Fucus distichus
middle	Pollicipes polymerus Mytilus californianus Semibalanus carriosus	Mytilus californianus Semibalanus carriosus	Mytilus trossulus* Semibalanus carriosus Ulva/ Ulvaria spp.	Mytilus trossulus * Ulva/ Ulvaria spp.	Semibalanus carriosus Ulva/ Ulvaria spp.	Ulva/ Ulvaria spp.	Mytilus trossulus" Ulva/ Ulvaria	macrobiota due to sediment mobility	dominated; may be a Protected wave exposure but shows an assemblage of	ponded water in lagoon creates
mid/low	Alaria 'nana' morph	Hedophyllum sessile Phyllospadix scouleri							indicator species from higher wave exposures. Assemblage	narrow intertidal and a reduced biota in brackish water, may have
lower	Lessoniopsis littoralis Lithothannion	Alaria 'marginata' morph Lithothamnion	Laminaria groenlandica Laminaria saccharina 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 Inetkeana 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			
			Zostera marina	Zostera marina	Zostera marina	Zostera marina	Zostera marina			

