

MAJOR SUBSTRATE	BEDROCK/BOULDER	BEDROCK/BOULDER	BEDROCK/BOULDER	BEDROCK/BOULDER	SAND & GRAVEL	SAND & GRAVEL	SAND/MUD	SEDIMENT	BEDROCK OR SEDIMENT
COASTAL CLASSES	1-20	1-20	1-23, 32, 33	1-23, 33	24, 25, 26, 32	24, 25, 26, 32	27, 28, 29, 30, 31	24 - 30	
EXPOSURE (EXP_BIO)	Е	SE	SP	P, VP	SP	P, VP	SP, P, VP	SE, E	VP, P, SP
HABITAT OBSERVED (HAB_OBS)	2	3 *	4	5	6	7	8	9	10
upper	Verrucaria	Verrucaria	Verrucaria	Verrucaria	Verrucaria	Verrucaria	marsh grasses & rushes		
		Enteromorpha	Enteromorpha	Enteromorpha	Enteromorpha	Enteromorpha			tidal current dominated; may be a Protected wave exposure but shows
							Salicornia virginica		
	Balanus glandula	Balanus glandula	Balanus glandula	Balanus glandula	Balanus glandula	Balanus glandula	Balanus glandula		
	Pelvetiopsis limitata	Fucus distichus	Fucus distichus	Fucus distichus	Fucus distichus	Fucus distichus	Fucus distichus		
middle									an assemblage of
	Semibalanus carriosus	Semibalanus carriosus	Semibalanus carriosus		Semibalanus carriosus			no visible macrobiota due to sediment mobility	from higher wave exposures.
	Pollicipes polymerus		Mytilus trossulus	Mytilus trossulus	Mytilus trossulus	Mytilus trossulus	Mytilus trossulus		
			Ulva/ Ulvaria spp.	Ulva/ Ulvaria spp.	Ulva/ Ulvaria spp.	Ulva/Ulvaria spp.	Ulva/ Ulvaria spp.		
mid/low	Mytilus californianus	Mytilus californianus							
		Microcladia/Iridea type mixed reds	Gigartina/Odonthalia type mixed reds	Gigartina/Odonthalia type mixed reds	Gigartina/Odonthalia type mixed reds	Gigartina/Odonthalia type mixed reds			
	Postelsia palmaeformis								
		Hedophyllum sessile							
		Codium fragile	Codium fragile		Codium fragile				
lower	Lessoniopsis littoralis		Laminaria saccharina	Laminaria saccharina	Laminaria saccharina	Laminaria saccharina			
		Egregia menziesii							
	Laminaria setchellii	Laminaria setchellii							
		Laminaria groenlandica	Laminaria groenlandica		Laminaria groenlandica				
	Alaria nana.	Alaria marginata.	Alaria marginata.		Alaria marginata.				
		Eisenia arborea							
	Lithothamnion	Lithothamnion	Lithothamnion		Lithothamnion			_	
			Sargassum muticum		Sargassum muticum				
		Agarum sp	Agarum sp	Agarum sp	Agarum sp	Agarum sp			
		Phyllospadix scouleri							1
subtidal		Macrocystis integrifolia	Macrocystis integrifolia	Macrocystis integrifolia	Macrocystis integrifolia	Macrocystis integrifolia			
	Nereocystis luetkeana	Nereocystis luetkeana	Nereocystis luetkeana		Nereocystis luetkeana				
		Strongylocentrotus	Strongylocentrotus		Strongylocentrotus				
		franciscanus	franciscanus		franciscanus				
			Zostera marina	Zostera marina	Zostera marina	Zostera marina	Zostera marina		