

| SUBSTRATE<br>STABILITY<br>MAJOR<br>SUBSTRATE | IMMOBILE SUBSTRATES  |  |  |  | MOBILE OR PARTIALLY MOBILE<br>SUBSTRATES   |  |   |  | CURRENT-<br>DOMI-<br>NATED   | TIDAL<br>IAGOON                                  |
|--|--|--|--|--|--|--|---|--|--|--|
|  | BEDROCK  | BEDROCK/BOULDER  | BEDROCK/GRAVEL   | BEDROCK/GRAVEL                                 | SAND & GRAVEL  | SAND & GRAVEL                                  | SAND/MUD  | SEDIMENT                                     | BEDROCK OR<br>SEDIMENT   | BEDROCK OR<br>SEDIMENT                           |
| COASTAL<br>CLASSES                           | 1-20   | 1-23, 32, 33   | 1-23, 33   | 1-23, 33                                       | 24 - 30, 32<br>no SAL band   | 24 - 30, 32<br>no SAL band                     | 24 - 30, 31<br>has SAL band                                     | 24-30  | 34   | 35   |
| EXPOSURE<br>(EXP BIO)                        | Е  | SE   | SP   | VP, P  | SP   | VP, P  | VP, P, SP   | SE, E  | VP, P, SP  | VP, P, SP  |
| COMMUNITY<br>CODE<br>(HAB OBS)               | 2  | 3  | 4  | 5  | 6  | 7  | 8   | 9  | 10   | 11   |
| upper  | Verrucaria<br>Balanus glandula   | Verrucaria<br>Enteromorpha<br>Balanus glandula   | Verrucaria<br>Enteromorpha<br>Balanus glandula   | Verrucaria<br>Enteromorpha<br>Balanus glandula | Verrucaria<br>Enteromorpha<br>Balanus glandula   | Verrucaria<br>Enteromorpha<br>Balanus glandula | grasses & rushes<br>Salicornia<br>virginica<br>Balanus glandula |  |  | Balanus glandula                                 |
|  | 5. #1.1.   | Fucus distichus  | Fucus distichus  | Fucus distichus                                | Fucus distichus  | Fucus distichus                                | Fucus distichus   | no visible                                   | tidal current  | Fucus distichus                                  |
| middle                                       | Pollicipes polymerus<br>Mytilus californianus<br>Semibalanus carriosus | Mytilus californianus<br>Semibalanus carriosus   | Mytilus trossulus*<br>Semibalanus carriosus<br>Ulva/ Ulvaria spp.                                      | Mytilus trossulus *<br>Ulva/ Ulvaria spp.      | Semibalanus carriosus<br>Ulva/ Ulvaria spp.  | Ulva/ Ulvaria spp.                             | Mytilus trossulus"<br>Ulva/ Ulvaria                             | macrobiota<br>due to<br>sediment<br>mobility | dominated; may<br>be a Protected<br>wave exposure<br>but shows an<br>assemblage of | ponded water in<br>lagoon creates                |
| mid/low                                      |  |  | Civa Civaria spp.  | Owa Owaria spp.                                | Olvar Olvaria spp.   | Owa Owaria spp.                                | owa owaria  | 1  | indicator species  | narrow intertidal                                |
|  | Alaria 'nana' morph  | Hedophyllum sessile<br>Phyllospadix scouleri   |  |  |  |  |   | from higher<br>wave exposures.<br>Assemblage | and a reduced<br>biota in brackish<br>water, may have                              |  |
| lower  | Lessoniopsis littoralis  | Alaria 'marginata'<br>morph  | Laminaria groenlandica<br>Laminaria saccharina<br>Alaria 'marginata' morph                             | Laminaria saccharina                           | Laminaria groenlandica<br>Laminaria saccharina<br>Alaria 'marginala'<br>morph                          | Laminaria saccharina                           |   |  | observed is<br>'anomalous' for<br>the wave energy<br>of the site.                  | associated<br>current<br>dominated at<br>outflow |
|  | Lithothamnion  | Lithothamnion  | Lithothannion  |  | Lithothamnion  |  |   |  |  |  |
| subtidal                                     | Nereocystis luetkeana  | Nereocystis luetkeana<br>Macrocystis integrifolla<br>Agarum spp.<br>Strongylocentrotus<br>franciscanus | Nereocystis luetkeana<br>Macrocystis integrifolia<br>Agarum spp.<br>Strongylocentrotus<br>franciscanus | Macrocystis integrifolia<br>Agarum spp.        | Nereocystis luetkeana<br>Macrocystis integrifolia<br>Agarum spp.<br>Strongylocentrotus<br>franciscanus | Macrocystis integrifolia<br>Agarum spp.        |   |  |  |  |