

## Marine Plants – Important Algae Habitat 5 – Mudflats and Estuarine Shorelines

### description

The algae that form on the benthos are plant-like organisms, very diverse and very different in size, shape and colour; they are typically designated with the term seaweeds. Seaweeds occur on shores with a hard bottom or other type of stable surface. Estuaries commonly have mud or organic sediments and are generally brackish, with low wave exposure. Mud flats have little slope and generally retain water due to the high mud composition in the sediments. Both shoreline types were identified at the BC Marine Conservation Analysis (BCMCA) Marine Plant Experts Workshop in March 2007 as highly productive and important habitat for marine algae.

This atlas page illustrates a summary of shore morphology and substrate in terms of 36 different coastal classes. Coastal Classes are derived from the BC Shorezone Mapping system, a systematic methodology for mapping the biophysical character of the Shorezone by way of aerial low tide oblique surveys for the entire BC coastline. The system involves the subdivision of the Shorezone into along-shore units and across-shore components. Coastal Classes are an overall indicator of repeatable collections of across-shore components contained within the unit defined by a systematic consideration of substrate, sediment, width and slope. This surrogate feature for algae habitat has been created by querying the coastal classes where mudflats or estuarine shorelines are described as a major feature. The coastal classes included are as follows:

- Mud Flat Wide
- Estuary Organics and Fines



PHOTO: JACLYN MCPHADDER



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### data sources

- Province of British Columbia - Shorezone Mapping System

### data resolution

- Data from the BC Shorezone Mapping System is linked to shoreline segments that average approximately 400 metres in length. There are a total of 90,027 shoreline segments with some attribute information.

### date collected

- 1979-2008

### date compiled

- 2009

### reviewers

- Robert DeWreede, University of British Columbia

### reviewer comments

- None provided.

### caveats of use

- Recommended date of expiry for use of these data in a marine planning context: None provided.

### map, feature data and metadata access

- Visit [www.bcmca.ca/data](http://www.bcmca.ca/data) for more information.

### references

- For more detailed information on the Coastal Classes of British Columbia as described in the BC Shorezone Mapping System (March 1995) see: [www.ilmb.gov.bc.ca/risc/pubs/coastal/pysshore/index.htm](http://www.ilmb.gov.bc.ca/risc/pubs/coastal/pysshore/index.htm)



**BCMCA Atlas**  
**Marine Plants**  
**Important Algae Habitat 5**

**Legend**

- ~ Mudflats and Estuarine  
Shorelines

Note:  
- This dataset consists of coastal classes  
recommended as a surrogate for algae habitat  
including:

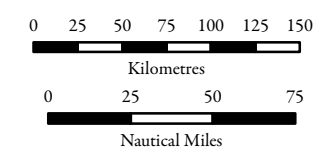
- Mud Flat Wide  
Sand Beach Narrow

**Data Sources:**  
Province of British Columbia -  
Shorezone Mapping System

**Base Data:**  
ESRI Base Data, GeoBase, GeoBC,  
NOAA, Natural Resources Canada,  
USGS, Washington State Government

**Thematic Data:**  
For more information on data sources  
and methods please refer to the  
facing page to this map

**Projection:** BC Albers NAD83



1:4,250,000

\* Written scales are approximate and  
are based on a 11 x 17 inch paper size.

Prepared for:



Map template by Caslys Consulting Ltd.  
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