

## Marine Plants – Eelgrass Bioband

### description

Eelgrass (*Zostera marina*) occurs on fine sediment in the subtidal zone and may extend slightly upslope into the lower intertidal. Eelgrass beds are important for sediment deposition, substrate stabilization, and as substrate for epiphytic algae and micro-invertebrates. (Substrates include rocks, plants, animals, boat bottoms, piers, debris and, less frequently, sand and mud.) Eelgrass beds are also nursery grounds for many species of economically important fish and shellfish. Eelgrass often forms beds in bay mud in the estuarine setting and is an important food source for marine birds.

This atlas page illustrates the eelgrass bioband information 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. The marine flora and fauna visible within a shore unit are described in terms of common species assemblages known as biobands. The biobands are defined by the dominant cover species. This feature displays the shoreline units where eelgrass was observed and coverage was rated as either ‘patchy’ (visible in less than 50% of the shore unit) or ‘continuous’ (visible in greater than 50% of the shore unit).



PHOTO: MICHAEL HAWKES

### data sources

- Province of British Columbia - Shorezone Mapping System - Bioband

### 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

- Cynthia Durance, Precision Identification
- Brad Mason, Fisheries and Oceans Canada, Community Mapping Network
- Mary Morris, Archipelago Marine Research Ltd.

### reviewer comments

- There are data gaps in the Strait of Georgia for bioband mapping outside of the newly completed Gulf Islands area. In particular, the east side of the Strait south of Lund is conspicuously blank of bands. This data gap needs to be accounted for in the analyses.
- Observations of eelgrass are affected by light and wind conditions, the turbidity of the water and the skills of the observers.
- Patchy occurrences may have significant contributions to the overall biomass of eelgrass but this needs more ground verification.

### caveats of use

- No biological data were collected with the original Shorezone classification in the Strait of Georgia, and therefore the coverage of the eelgrass bioband attribute is a data gap in the Strait of Georgia region. The coastline of the Strait of Juan de Fuca, west of Victoria is also a data gap.
- This dataset contains a subset of data collected by the Province of British Columbia in an effort to map and classify the entire BC coastline between 1995 and 2002. The provincial physical shorezone mapping initiative was developed for different purposes, using different survey techniques with different methodologies within each technique and, therefore, considerable care must be taken when using the data, even for site-specific inquiries. Refer to the original metadata for more information on the mapping and classification process.
- Recommended date of expiry for use of these data in a marine planning context: No expiry date.

### 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 biological component of the BC Shorezone Mapping System (March 1995) see: [www.ilmb.gov.bc.ca/risc/pubs/coastal/bioshore/index.htm](http://www.ilmb.gov.bc.ca/risc/pubs/coastal/bioshore/index.htm)

**BCMCA Atlas**  
**Marine Plants**  
**Eelgrass Bioband**

**Legend**

 Eelgrass Bioband

**Data Sources:**

Province of British Columbia - Shorezone Mapping System

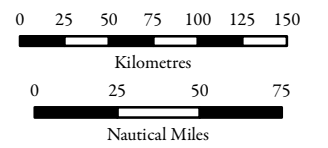
**Base Data:**

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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Note: The inset has been provided to illustrate the level of detail available in the data. The inset is for illustrative purposes only and does not imply any significance to this region.