

Marine Plants – Priority Eelgrass Habitat

description

Eelgrass (*Zostera marina*) is a type of marine plant known as seagrass, which, unlike seaweed, contains a vascular system that transports liquid and nutrients. Eelgrass 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 such as Brant and Wigeon.

According to the Seagrass Conservation Working Group, eelgrass grows in areas with gravel, cobble, and boulders in British Columbia. It is much more common to find eelgrass in soft substrate (sand and mud) in areas south of Campbell River, while North of Campbell River it is more common to find eelgrass in areas with rock.

This atlas page illustrates the distribution of priority eelgrass habitat. This feature was recommended at the BC Marine Conservation Analysis (BCMCA) Marine Plant Experts Workshop in March 2007 and was described as eelgrass habitat used by other species (e.g. herring, juvenile salmon, Dungeness crab, Brant, and Great Blue Heron). Therefore, eelgrass polygons were identified that intersected (overlapped spatially) with any one of the following features:

- Herring spawn shoreline of high importance (ranking 70%+ in the cumulative spawn index).
- Great Blue Heron nest sites and foraging areas.
- Brant observations.
- There were no available data to illustrate areas of importance to juvenile salmon or Dungeness crab, thus they were not included.



PHOTO: MICHAEL HAWKES

data sources

- Bird Studies Canada - BC Coastal Waterbird Survey
- Capital Regional District – Harbours Atlas
- Community Mapping Network (CMN) – Eelgrass Surveys
- Environment Canada (Canadian Wildlife Service) - BC Ferry Surveys
- Environment Canada (Canadian Wildlife Service) – Coastal Waterbird Inventory
- Environment Canada (Canadian Wildlife Service) – Marine Birds Areas of Interest
- Environment Canada (Canadian Wildlife Service) - Pelagic Seabird Surveys
- Environment Canada (Canadian Wildlife Service) – West Coast Vancouver Island Waterbird Survey
- Fisheries and Oceans Canada – Cumulative Spawn Habitat Index (http://www.pac.dfo-mpo.gc.ca/sci/herring/bulletin_e.htm)
- Fisheries and Oceans Canada – Eelgrass Surveys
- Living Oceans Society – Merged Eelgrass Datasets
- Parks Canada – Great Blue Heron nest sites
- Parks Canada – Haida Gwaii Marine Plants; Pacific Rim Confidence Weighted Abundance Rasters
- Province of British Columbia – Eelgrass Surveys

data resolution

- Because of the poor registration and differences in coastline this data should be considered accurate only to a scale of 1:40,000.

date collected

- 1890–2008

date compiled

- 2009

reviewers

- Cynthia Durance, Precision Identification

reviewer comments

- These are areas that have known importance to eelgrass plus several other ecologically sensitive or endangered species.

caveats of use


- This method of prioritizing eelgrass habitat only takes into account those recommended species for which data were available. Therefore, other species have not been considered.
- Survey effort is not consistent across all planning units or across all areas of the coast and some species tend to be under-represented by some survey methods. Areas with no data may not have been surveyed and these data gaps are not necessarily indicative of an absence of eelgrass. Some locations may still be important but currently lack associated data to confirm their value.
- This feature is a compilation of data collected by many people, for different purposes, using different survey techniques with different methodologies within each technique and, therefore, considerable care must be taken when using the data. Please refer to the original metadata document for data limitations and usage.
- 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 for more information.

BCMCA Atlas
Marine Plants
Priority Eelgrass Habitat

Legend

 Priority Eelgrass Habitat

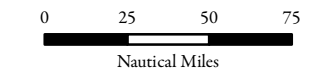
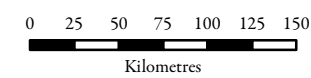
Note:
 - Size of the eelgrass polygons has been exaggerated slightly to increase visibility at this scale.

Data Sources:
 Community Mapping Network,
 Fisheries and Oceans Canada,
 Living Oceans Society, Parks Canada,
 Province of British Columbia

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



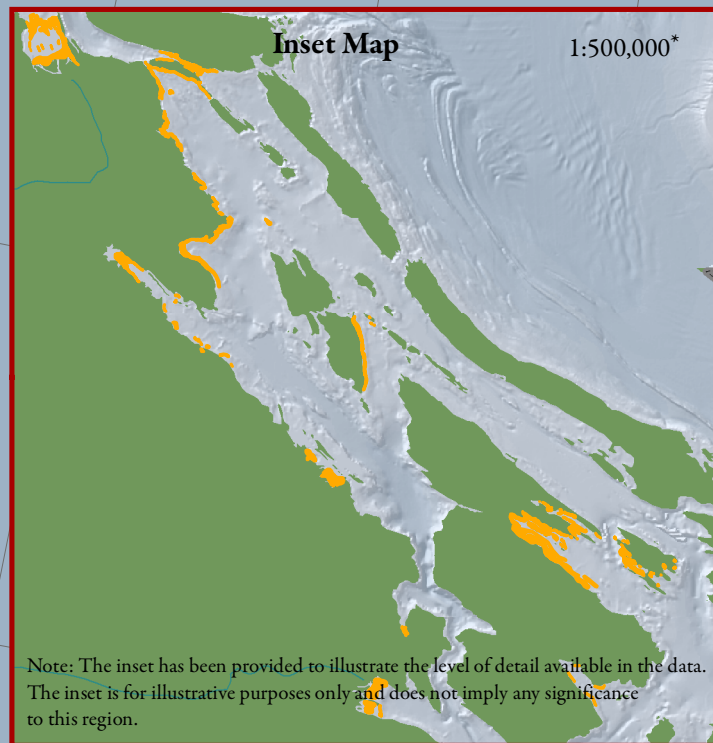
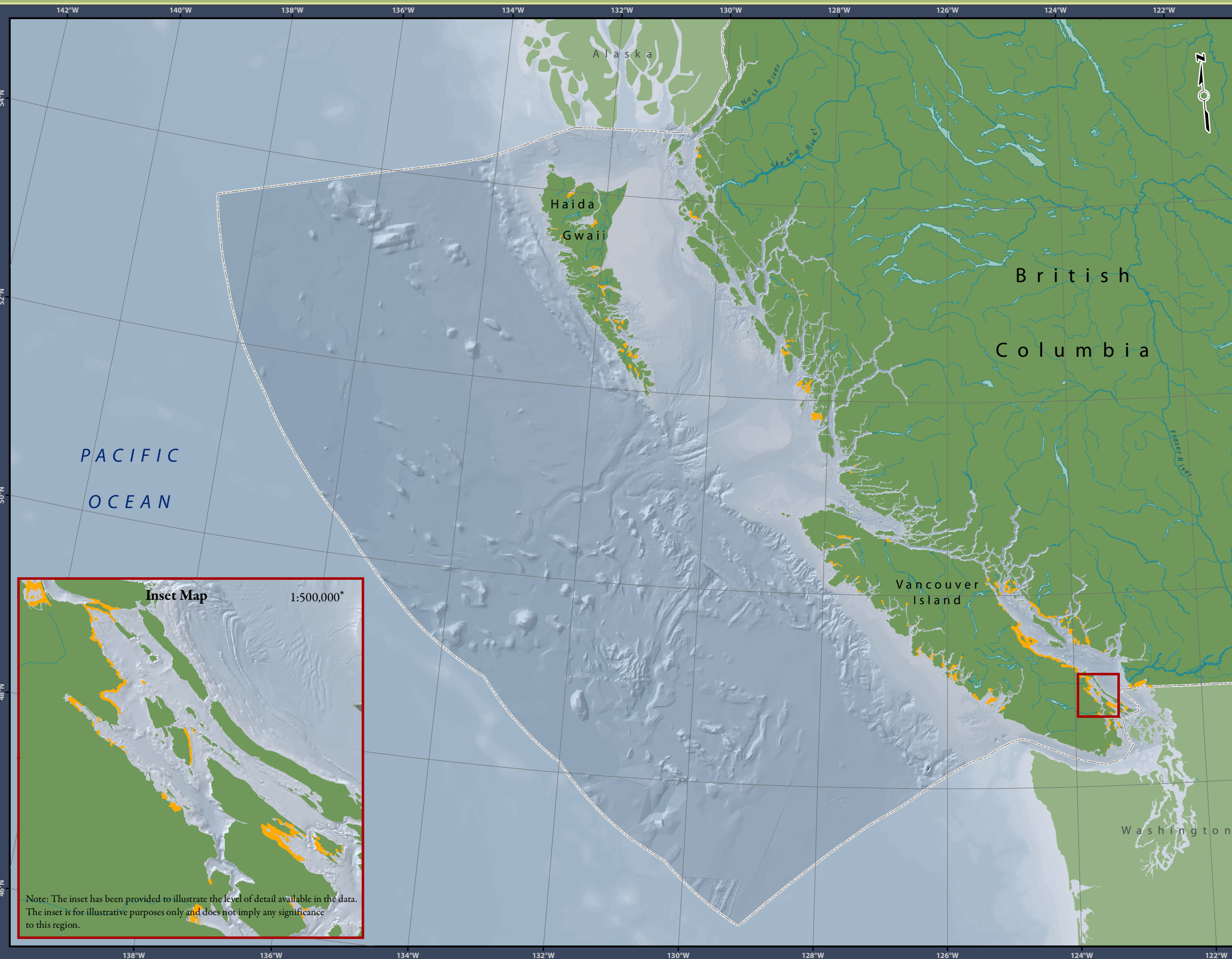
1:4,250,000 *

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

Prepared for:



Map template by Caslys Consulting Ltd.
 June 2, 2010



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.