

## Shipping & Transport - Feature Count

### description

One of the goals of BC Marine Conservation Analysis (BCMCA) is to collaboratively identify marine areas of high conservation value and areas important to human use in Canada's Pacific Ocean, and to make these products available for use in marine planning. In order to identify areas important to human use the BCMCA ran individual Marxan analyses for each of six sectors of marine use (commercial fishing, ocean energy, shipping and transport, sport fishing, tenures and recreation and tourism). The features used in these analyses are illustrated in the [Marine Atlas of Pacific Canada](#) and represent where and how each sector uses the marine resources of the Canadian Pacific.

Canada's Pacific Ocean is traversed by a wide variety of vessel types, including larger vessels such as passenger ferries, carriers such as bulk cargo and container ships, cruise ships, fishing boats, tankers carrying oil and liquid chemicals and tug boats. Some of these ships visit ports along the BC coast while others simply transit through Canadian waters on the way to ports in other countries. All ships over 20 metres in length, and ships engaged in towing or pushing any vessel or object more than 20 metres in length (other than fishing gear) that had a combined length of more than 45 metres, are required to report their position to the Vessel Traffic Services system monitored by the Canadian Coast Guard. Pleasure yachts, fishing vessels less than 24 metres and boats operating within log booming grounds are exempt from this system.

This map was generated by overlaying all the shipping and transport features that the BCMCA collated to go into the Marxan analysis. The map illustrates the number of different shipping and transport features that inform each 2 kilometre by 2 kilometre planning unit. There were a total of 17 shipping and transport features used in the Marxan analysis. Ten of these are from vessel density mapping while five are from ferry routes. The remaining two are ferry terminals and tow boat reserves. As the facing map shows, up to 14 of them overlapped in some of the planning units.

Seventeen shipping and transport features were included in this tally:

- Ferry Routes - High Use
- Ferry Routes - Low Use
- Ferry Routes - Moderate Use
- Ferry Routes - Very High Use
- Ferry Routes - Very Low Use
- Ferry Terminals
- Summer Carrier Vessel Density (includes Bulk Carriers and Container Vessels)
- Summer Cruise Vessel Density
- Summer Fishing Vessel Density
- Summer Tanker Vessel Density
- Summer Tug Vessel Density
- Tow Boat Reserves
- Winter Carrier Vessel Density (includes Bulk Carriers and Container Vessels)
- Winter Cruise Vessel Density
- Winter Fishing Vessel Density
- Winter Tanker Vessel Density
- Winter Tug Vessel Density

### data sources

- British Columbia Marine Conservation Analysis (BCMCA)
- Canadian Coast Guard
- Province of British Columbia, Coastal Resource Information Management System (CRIMS)
- Province of British Columbia, Ministry of Forests, Lands and Natural Resource Operations, GeoBC, Land and Resource Data Warehouse (LRDW)
- Transport Canada

*(Note: Please see individual feature atlas pages and/or metadata for feature specific data sources.)*

### data resolution

- Features were tallied by their presence in 2 kilometre by 2 kilometre planning units.

### date compiled

- 2010

### reviewers

- Not reviewed.

### reviewer comments

- None provided.

### caveats of use

- Ferry routes depict channels travelled rather than a specific route. However in creating this map, planning units were noted as either having or not having a route. This map may misrepresent feature count if ferries traverse different planning units than those that overlap the line depicting the route.
- Please see individual feature atlas pages and metadata for feature or shipping and transport specific caveats.
- Density feature maps do not always accurately illustrate individual vessel tracks. Real vessels do not appear and disappear in mid-ocean, as the map may imply.
- Vessel density data coverage does not go beyond the Canadian EEZ, thus tracks end there.
- Tanker routes in and out of Kitimat were changed in 2009 ([see feature map facing page](#)) and the data included in this overlay do not take that change into account.
- The data overlaid here reflect past use levels and may not reflect current or future reality.
- Recommended date of expiry for use of these data in a Marine Planning context: data should be refreshed every four to five years.

### map, feature data and metadata access

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

**BCMCA Atlas**  
**Shipping & Transport**  
**Feature Count**

**Legend**

**Feature count**  
 (by planning unit)

- 1 - 2
- 3
- 4 - 5
- 6 - 7
- 8 - 9
- 10 - 14

Note:  
 - Classification based on 6 quantiles.

**Data Sources:**

BCMCA,  
 Canadian Coast Guard,  
 Province of British Columbia,  
 Transport Canada

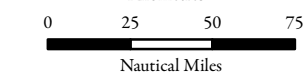
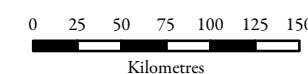
**Base Data:**

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 \*

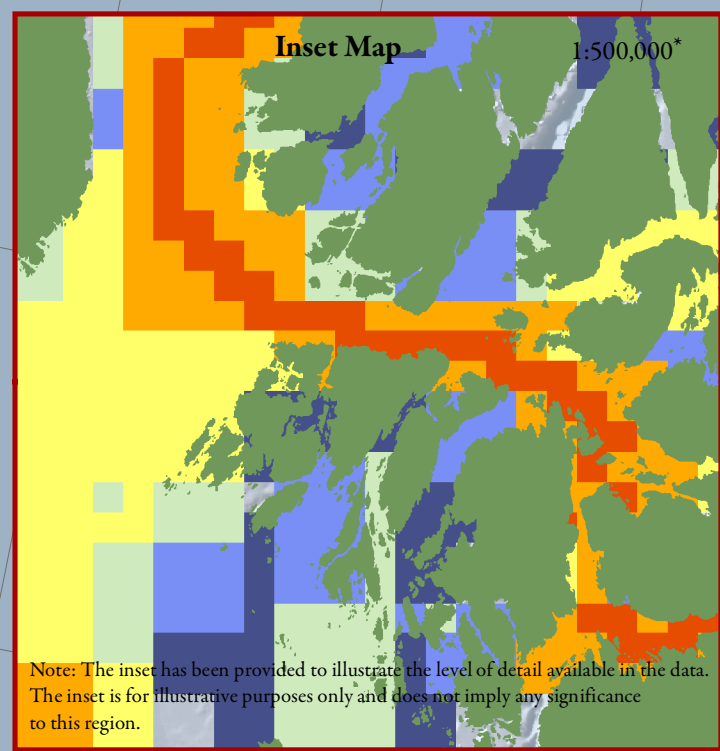
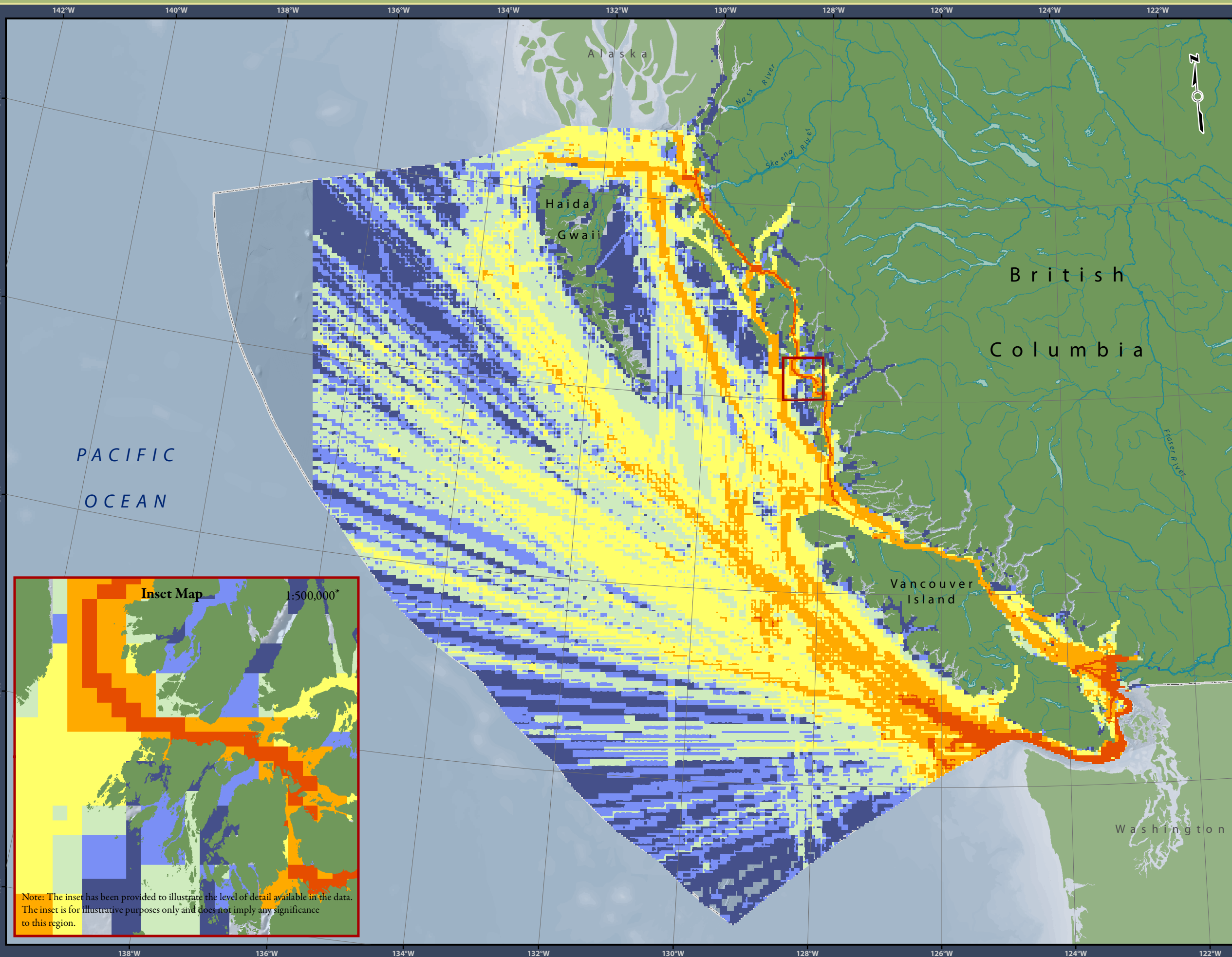
\* Written scales are approximate and  
 are based on a 11 x 17 inch paper size.

Prepared for:



Map template by Caslys Consulting Ltd.

May 25, 2011



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.