

## Basic Information

*This section contains basic information about the dataset, suitable for a minimal metadata entry.*

**Title:** Important Areas for Geography in Pacific North Coast Integrated Management Area

**Dataset ID:** ia-geography-pncima

**Quality Control:** Check Required

**Summary:** This layer details Important Areas (IAs) relevant to important geographic features in the Pacific North Coast Integrated Management Area (PNCIMA). This data was mapped to inform the selection of marine Ecologically and Biologically Significant Areas (EBSA). Experts have indicated that these areas are relevant based upon their high ranking in one or more of three criteria (Uniqueness, Aggregation, and Fitness Consequences). The distribution of IAs within ecoregions is used in the designation of EBSAs.

Canada's Oceans Act provides the legislative framework for an integrated ecosystem approach to management in Canadian oceans, particularly in areas considered ecologically or biologically significant. DFO has developed general guidance for the identification of ecologically or biologically significant areas. The criteria for defining such areas include uniqueness, aggregation, fitness consequences, resilience, and naturalness. This science advisory process identifies proposed EBSAs in Canadian Pacific marine waters, specifically in the Strait of Georgia (SOG), along the west coast of Vancouver Island (WCVI, southern shelf ecoregion), and in the Pacific North Coast Integrated Management Area (PNCIMA, northern shelf ecoregion).

Initial assessment of IA's in PNCIMA was carried out in September 2004 to March 2005 with spatial data collection coordinated by Cathryn Clarke. Subsequent efforts in WCVI and SOG were conducted in 2009, and may have used different scientific advisors, temporal extents, data, and assessment methods. WCVI and SOG IA assessment in some cases revisits data collected for PNCIMA, but should be treated as a separate effort.

Other datasets in this series detail IAs for birds, cetaceans, coral and sponges, fish, invertebrates, and other vertebrates.

Though data collection is considered complete, the emergence of significant new data may merit revisiting of IA's on a case by case basis.

**Maintainer Email:** Joanne.Lessard@dfo-mpo.gc.ca

**Cite this data as:** Cathryn Clarke, Bill Crawford, Ian Perry, Dave Mackas, Tom Tomascik, and Marlow Pellatt. 2005. Important Areas for Geography in Pacific North Coast Integrated Management Area. Published Apr 1, 2019. Data distributor: Cathryn Clarke, Marine Spatial Ecology Section, Fisheries and Oceans Canada, Nanaimo, BC.

**Start Date:** 2004-09-01

**End Date:** 2005-03-31

## Contact Information

*This section contains contact information for the data creator and program manager.*

**Data Creator:**

Name: Cathryn Clarke  
Email: Cathryn.Murray@dfo-mpo.gc.ca  
Position: Independent consultant  
Organization: Government of Canada; Fisheries and Oceans Canada  
Address: 3190 Hammond Bay Road, Nanaimo, British Columbia, V9R 5K6, Canada  
Phone: 250-363-3001

**Co-Creators:** Bill Crawford, Ian Perry, Dave Mackas, Tom Tomascik, Marlow Pellatt

**Program Manager:**

Name: Joanne Lessard  
Email: Joanne.Lessard@dfo-mpo.gc.ca  
Position: Program Head  
Organization: Government of Canada; Fisheries and Oceans Canada  
Address: 3190 Hammond Bay Road, Nanaimo, British Columbia, V9R 5K6, Canada  
Phone: 250-729-8364

**General**

*General metadata compatible with the Canada Open Data metadata standard.*

**Topic Category:** Oceans

**Date Completed:** 2005-03-31

**Date Published:** 2019-04-01

**Status:** Completed

**Update Frequency:** Not Planned

**Dataset Level:** Series

**Keywords (GoC Thesaurus):** environmental quality, environmental planning, marine ecosystems, ecology, oceanography, parks

**Science**

*This section contains metadata specific to the Science branch at DFO.*

**Science Keywords:** queen charlotte basin, queen charlotte sound, ia, ebsa, bc, british columbia, important areas, pncima

**Theme:** Coastal Species or Ecosystem

**Methods:** Researchers with expertise for the relevant geographic features drew polygons on paper map to denote Important Areas for physical and biological oceanographic features that met a priori criteria. The experts' hand-drawn polygons were heads-up digitized using ArcView 3.2 on the 50,000 Canadian Hydrographic Service (CHS) coastline watershed basemap. Hand-drawn polygons were clipped using the PNCIMA boundary polygon provided by OHEB-GIS unit. The layers of individual experts were shared among all the experts for the species grouping. Experts were asked to provide confirmation and to check for

accuracy and completeness. Any changes requested by the experts were performed and again returned to the experts for vetting.

The experts consulted are: Bill Crawford (oceanography), Ian Perry (oceanography), Dave Mackas (oceanography), Tom Tomascik (Parks Canada), and Marlow Pellatt (Parks Canada).

The dataset was updated in 2019 to conform to MSEA's GIS Hub publication standards. The PNCIMA IA data series was split into taxonomic themes (birds, cetaceans, coral and sponges, fish, geographic features, invertebrates, and other vertebrates). The Check Geometry tool was used to validate each layer.

This package also includes project documentation and tech reports relevant to the IA process and its role within the selection of EBSAs.

**Data Sources:**

Source: Paper maps, March 2005, by Bill Crawford, Ian Perry, Dave Mackas, Tom Tomascik, and Marlow Pellatt.

**Scripts or Software Routines:** Data was digitized from paper maps in ArcView 3.2, using polygons which were hand-drawn upon maps by experts.

**Spatial Data Quality:** Location data is typically digitized from paper charts and snapped to geographic features such as coast-lines. Accuracy of locations designated is limited by expert knowledge of available research at time of publication.

**Positional Accuracy:** Positional accuracy is dependent on the expert responsible for polygon creation. Polygons were hand-drawn on PNCIMA-scale maps so boundaries at different scales may not be accurate.

**Attribute Accuracy:** This information is a one-time summary of the available expert knowledge.

**Logical Consistency:** All features are rated by standard criteria across the PNCIMA IA's, though multiple experts are used for different IA's and ratings are selected based upon their knowledge. Experts and their knowledge may change between the PNCIMA, WCVI and SOG IA's. Rating schema were adhered to in differing degrees between these series. The delineating and rating of IA's is dependant upon the experts cited. The experts themselves may have used a variety of study methods and literature to determine what areas are important to given taxa. Less information may have been available for particular taxa at time of publication. More easily studied taxa (eg those occurring in more accessible geography and water depth) may have better data.

**Completeness:** This information is a one-time summary of the available expert knowledge.

**Absence Data:** No Absence Data

**Uncertainties:** Criteria scores are subjective ratings assigned by experts based upon their understanding of their best available data.

**Use Restrictions:** This data was created to inform the selection of EBSAs. Not for navigational purposes. Criteria may be unsuitable for other forms of assessment.

**Change History:**

**Date of Change    Description of Change**

**Species Code List:**

WAA - BRACHYURA (SECTION) (TRUE CRABS), Targeted

**Species Data:**

<b>Code and Name</b>	<b>Age Data</b>	<b>Obs Type</b>
WAA - BRACHYURA (SECTION) (TRUE CRABS)		Targeted

**References:**

Reference: Clarke, C.L., and G. S. Jamieson. 2006a. Identification of Ecologically and Biologically Significant Areas in the Pacific North Coast Integrated Management Area: Phase I - Identification of Important Areas. 2678: 97 p.

Reference: Clarke, C.L., and G. S. Jamieson. 2006b. Identification of Ecologically and Biologically Significant Areas for the Pacific North Coast Integrated Management Area: Phase II - Final Report. 2686: 32 p.

Reference: DFO. 2004. Identification of Ecologically and Biologically Significant Areas. DFO Canadian Science Advisory Secretariat Ecosystem Status Report 2004/006: 15 p.

Reference: DFO. 2007. Guidance Document on Identifying Conservation Priorities and Phrasing Conservation Objectives for Large Ocean Management Areas. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2007/010.

Reference: Jamieson, G.S. and C. Levesque. 2014. Identification of Ecologically and Biologically Significant Areas on the West Coast of Vancouver Island and the Strait of Georgia, and in some nearshore areas on the North Coast: Phase II – Designation of EBSAs. DFO Can. Sci. Advis. Sec. Res. Doc. 2014/101: 36 p.

**Collaboration:** Tom Tomascik and Marlow Pellatt were associated with Parks Canada.

**Confidentiality:** Not Protected