Canadian Geographical Names – CGN
Product Specifications

Version 2.2

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Natural Resources Canada
Canada Centre for Mapping and Earth Observation
CGDI Division

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URL: https://open.canada.ca/data/en/dataset/e27c6eba-3c5d-4051-9db2-082dc6411c2c

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REVISION HISTORY

Date	Version	Description
January - 2003	1.0	Original version
August - 2005	1.0.1	Minor corrections
November - 2005	1.0.2	Minor corrections
December - 2005	1.1	Addition of Feature ID attribute
August - 2008	1.1.1	Improvement to coordinate description and few corrections
February - 2017	2.0	Update for new data model and FGP
November - 2020	2.1	Removal of GML format
May - 2024	2.2	Addition of new ISO Language Code attribute

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ACRONYMS AND ABBREVIATIONS

CGDI	Canadian Geospatial Data Infrastructure
CGN	Canadian Geographical Names
CGNDB	Canadian Geographical Names Data Base
CSV	Comma-Separated Values
ESSIM	Earth Sciences Sector Integrated Model
GIS	Geographic Information System
GNBC	Geographical Names Board of Canada
GPS	Global Positioning System
KML	Keyhole Markup Language
NAD83	North American Datum 1983
NTS	National Topographic System
SHP	Shapefile

1   Overview

The Canadian Geographical Names Data Base (CGNDB) is the authoritative national database of Canada's geographical names. The purpose of the CGNDB is to store place names and their attributes that have been approved by the Geographical Names Board of Canada (GNBC), the national coordinating body responsible for standards and policies on place names.

The CGNDB and the collection of geospatial datasets derived from it are maintained by Natural Resources Canada, through the Canada Centre for Mapping and Earth Observation.

The datasets contain all officially approved geographical names in Canada and are made available for extraction and visualization for online reference tools, GIS and GPS applications, and map production.

CANADIAN GEOGRAPHICAL NAMES	
Geographic extent	Canadian landmass and water bodies
Temporal extent	From 1897 to present
Attributes	Includes attributes such as officially approved names, type of geographic feature, coordinates of the feature, decision date, source (see full attribute list in Appendix A). **Note:** Additional attributes for these datasets, as well as information on formerly approved names, are available through the Geographical Names Search application on the Natural Resources Canada website.
Data structure	PostgreSQL database enhanced with PostGIS.
Data type	Point
Output formats	• CSV (Text, comma-separated values) • KML (Keyhole Markup Language) • SHP (Shapefile)
Delivery method	FTP site, through a web browser
Update cycle	Datasets are extracted from the CGNDB on a weekly basis

2   Data Identification

2.1   Spatial resolution ("scale")

NOT APPLICABLE

2.2   Language

English (eng) and French (fra) are the languages used for the datasets, with Indigenous languages where applicable.

2.3   Character set

The character coding standard used for the data is UTF-8.

Some Indigenous names include their syllabic form and/or use diacritical marks with regular Latin script. Certain fonts may be required in order to properly display these syllabics and diacritical marks.

2.4   Topic category

According to the [Government of Canada Core Subject Thesaurus](), the following topic categories apply:
- Toponymy
- Geography
- Geographic data
- Geographical maps
- Maps

2.5   Geographical extent

The minimum bounding rectangle within which data is available:
- West Bounding Coordinate: 141.000° West   (or   −141.000°)
- East Bounding Coordinate: 52.000° West   (or   −52.000°)
- North Bounding Coordinate: 84.000° North   (or   84.000°)
- South Bounding Coordinate: 41.000° North   (or   41.000°)

2.6   Geographic description

The geographic area within which the data is available is the Canadian land mass and water bodies.

2.7   Temporal Extent

The temporal extent for the content of the data is from 1897 to present.

3   Geospatial Characteristics

3.1   Spatial representation type

Vector data: specifically, only point data (latitude and longitude expressed in decimal degrees) are used to spatially represent geographic information.

3.2   Spatial representation

A point representing the approximate location of the associated feature.

3.3   Coverage and continuity

Data are available nationally or subdivided by province or territory, and for offshore undersea and surface maritime features. Overlap in points may exist in records for features which cross provincial boundaries or have multiple official names.

3.4   Data segmentation

NOT APPLICABLE

4   Data Model

4.1   Data modelling schema used

The data-modelling schema used is Earth Sciences Sector Integrated Model (ESSIM).

4.2   Application schema (Conceptual Model)

The Canadian Geographical Names datasets are represented as point data, to spatially indicate the geographic location of the feature associated with the place name. Each record is unique and contains attributes related to the place name. The following lists the fields of the data record that are currently available.

CANADIAN GEOGRAPHICAL NAMES SCHEMA
CGNDB ID
GEOGRAPHICAL NAME
ISO LANGUAGE CODE
LANGUAGE
SYLLABIC FORM
GENERIC TERM
GENERIC CATEGORY
CONCISE CODE
TOPONYMIC FEATURE ID
LATITUDE
LONGITUDE
LOCATION
PROVINCE – TERRITORY
RELEVANCE AT SCALE

| DECISION DATE |
| SOURCE |

5   Data Dictionary / Feature Catalogue

The Canadian Geographical Names products contain the attributes listed below, a subset of the full data in the Canadian Geographical Names Data Base (CGNDB). All attributes are text fields of 200 characters – for more detailed descriptions and field names for each output format, please see Appendix A.

ATTRIBUTE NAME	DESCRIPTION
CGNDB ID	Unique identifier of a geographical name used in the Canadian Geographical Names Data Base (CGNDB).
Geographical Name	Current official name.
ISO Language Code	The ISO 639-3 code for the Indigenous language of origin of the geographical name.
Language	Indigenous language of origin of the geographical name, if known.
Syllabic Form	Name written in the character script for the Inuktitut language.
Generic Term	Term describing the type of feature the geographical name is associated with.
Generic Category	A higher-level category used to group features based on general type (generic term).
Concise Code	Short alphanumeric code used to classify or regroup toponyms based on the nature of the related toponymic feature, e.g. PROV, MUN1, RIV, etc.
Toponymic Feature ID	Unique identifier (32-character string) of the geospatial data representation of the name.
Latitude	Latitude in Decimal Degrees.
Longitude	Longitude in Decimal Degrees.
Location	The name or value of the highest level of geographic unit (or administrative unit for Quebec records) in which the feature or place lies.
Province – Territory	The province or territory in which the named feature is located.
Relevance at Scale	A selection item to help determine whether or not the feature should be displayed on a map at a particular scale.
Decision Date	The date of the most recent official approval or change affecting the name.
Source	Name of the organization responsible for approving the Geographical Name.

6   Coordinate Reference System

6.1   Horizontal reference system

The horizontal reference system for spatial data is NAD83 (North American Datum 1983).

6.1.1   Horizontal coordinate system

Data are stored in latitude (Φ) and longitude (λ) geographic coordinates. The longitude is stored as a negative number to represent a position west of the prime meridian.

6.1.2   Unit of measure (coordinate system axis units)

The measuring unit for storing horizontal coordinates is the decimal degree.

6.2   Vertical reference system

NOT APPLICABLE

7   Data Quality

7.1   Scope

Data are provided by the federal, provincial and territorial naming authorities of the Geographical Names Board of Canada. Quality checks during data processing and data entry ensure validity of the name.

7.2   Lineage

NOT APPLICABLE

7.3   Completeness

This collection of datasets represents all current officially approved place names.

7.4   Logical consistency

Logical consistency for each record in the CGNDB is dependent on the data providers and in-house requirements. Relevant data quality checks are performed and inconsistencies validated with the GNBC members before entry into the database.

7.5   Positional accuracy

Positional accuracy varies depending on the source of the data; most often it is to the nearest second (30 metres).

7.6   Temporal accuracy

The records in the CGNDB contain dates for decisions approving official names (dates when federal/provincial/territorial naming authorities approved the name), and CGNDB creation and update dates.

7.7   Thematic (attributes) accuracy

NOT APPLICABLE

8   Metadata

For the Canadian Geographical Names, metadata exist only for the entire collection since all records are part of the same source database.

9   Data Portrayal / Data Transfer formats / Physical Model

9.1   Conversion process

The data are converted to SHP, KML and CSV formats.

9.2   Files

NOT APPLICABLE

9.3   Point entities

NOT APPLICABLE

9.4   Linear entities

NOT APPLICABLE

9.5   Surficial entities

NOT APPLICABLE

10   Data Delivery

10.1   Format information

The available output file formats for the product are:
- CSV (Comma-Separated Values)
- KML (Keyhole Markup Language)
- SHP (Shapefile).

Appendix A presents the name and detailed description of each attribute in each format.

10.2   Medium information
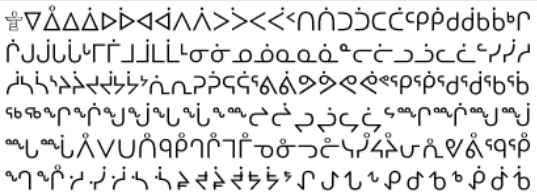
The datasets are available on-line via an FTP site.

10.3   Constraints information

Use of the data is subject to the Open Government Licence – Canada.

11 Data Capture and Maintenance

Data are maintained as required with updates provided by the naming authorities of the Geographical Names Board of Canada. The geospatial data are re-generated on a weekly basis to include the most recent updates from the CGNDB.

APPENDIX A: Attributes for CSV / KML and SHP Formats

ATTRIBUTE NAME		DESCRIPTION
CSV / KML	**SHP**	
CGNDB ID	CGNDB_ID	Unique identifier of a geographical name used in the Canadian Geographical Names Data Base (CGNDB). It consists of five capital letters.
Geographical Name	GEONAME	Current official name. For most features there is only one official name; those with more than one official name have the same Toponymic Feature ID, and the language is identified in the Language attribute. The CGNDB includes names approved in English and French, and over 90 Indigenous languages.
ISO Language Code	LANG_CODE	The ISO 639-3 code for the Indigenous language of origin of the geographical name. (See the complete list of languages in the CGNDB.)
Language	LANGUAGE	Indigenous language of origin of the geographical name, if known. This may differ from the official ISO 639-3 language name since the CGNDB languages include the spelling variants recommended by the Indigenous Nations.
Syllabic Form	SYLLABIC	Name written in a special character script for the Inuktitut languages, co-official with the Latin script. Display may require a syllabic font such as *Pigiarniq,* character set UTF-8. ᐁᐯᐃᐅᐃᐄᐓᐅᐨᐊ∀ᐱᐳᐳᑕᑕᑐᑎᑊᑭᑌᑮᑫᕮᕯᕰ ᕿᑦᑦᑥᕵᑥᑦᑣ⌐ᓇᓈᓄᓇ∆᚛∆ᑕ⌐⌐∋∊ᓇ⌐ᓵᓗᓘ ᓗᕲᕠᓴᑐᑐᓘ∪ᓇ∞∞ᑐᑐᓵᕵᒪᕗᕩᔐᔨᔪᑕ ᔭᑐᑡᕿᕯᓕ∧∨∪ᑎᕕᒥᓴᒻᒢᑎ᚛⌐ᐨᑐᑎᐃ ᔐᔈ᚛ᔐᔈᕾ᚛ᔈᔈᔈᔈ᛭ᑌᒦᒦᕗᕗᑐᕵ
Generic Term	GENERIC	Term describing the type of feature the geographical name is associated with – often, the name itself can be misleading (e.g. "Pike River" in Quebec is a Village, not a River). There is a controlled list defined by the Geographical Names Board of Canada.
Generic Category	CATEGORY	A higher-level category used to group features based on general type (generic term), one of: ▪ Administrative Area ▪ Terrain Feature ▪ Constructed Feature ▪ Underground Feature ▪ Feature Associated with Vegetation ▪ Undersea and Maritime Feature ▪ Ice and Snow Feature ▪ Volcanic Feature ▪ Populated Place ▪ Water Feature ▪ Unclassified
Concise Code	CONCISE	Code used to classify or regroup toponyms based on the nature of the related toponymic feature, e.g. PROV, MUN1, RIV, etc. This is a short alphanumeric code used particularly in the *Concise Gazetteer of Canada – 1997*. See the complete list.

ATTRIBUTE NAME		DESCRIPTION
CSV / KML	**SHP**	
Toponymic Feature ID	FEATURE_ID	Unique identifier (32-character string) of the geospatial data representation of the name. The same identifier is used for the various names that the same feature may have obtained over time.
Latitude (CSV only)	–	Latitude in Decimal Degrees
Longitude (CSV only)	–	Longitude in Decimal Degrees
Location	LOCATION	The name or value of the highest level of geographic unit (or administrative unit for Quebec records) in which the feature or place lies. When available, the next lower level is also provided. Each province or territory (except the Yukon and Nunavut) reports Location in its own distinct units:

PROVINCE	LOCATION UNIT
Alberta	Section, Township, Range
British Columbia	(Land) District and Division / Range
Manitoba	Section, Township, Range
New Brunswick	County
Newfoundland and Labrador	(Electoral) District
Northwest Territories	District
Nova Scotia	County
Prince Edward Island	County
Nunavut	–
Ontario	County / District, Portion
Prince Edward Island	County
Quebec	Municipalité
Saskatchewan	Section, Township, Range
Yukon	–

ATTRIBUTE NAME		DESCRIPTION
Province -Territory	PROV_TERR	The province or territory in which the named feature is located. If a feature lies in more than one province/territory, there is an entry for each province/territory where the name is adopted.
Relevance at Scale	REL_SCALE	A selection item to help determine whether or not the feature should be displayed on a map at a particular scale. Although this scale denominator can be used to help choose features, it sometimes takes into account "importance" based on population, size, historical significance, or other types of noteworthiness. Scale denominators:

Scale denominators:
- 25 000
- 50 000
- 250 000
- 1 000 000
- 2 000 000
- 5 000 000
- 7 500 000
- 15 000 000
- 30 000 000

ATTRIBUTE NAME		DESCRIPTION
Decision Date	DECISION	The date of the most recent official approval or change affecting the name.

ATTRIBUTE NAME		DESCRIPTION
CSV / KML	SHP	
Source	SOURCE	Name of the organization responsible for approving the Geographical Name.