



Environmental Management Planning using GIS

Links to Learning 2024

For assistance, please contact our GIS Specialist.

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GIS Data Browsers and Data Access Links

The most important parts of a GIS project are the datasets you are using to make your map. You may want to use vector (linework), raster (images), orthophotos or aerial imagery, and spreadsheets with statistical information. The vector layers are quite difficult to build yourself. Luckily, there are several GIS savvy companies and organizations within British Columbia that together, produce a wide range of open-source digital GIS Layers, which can be accessed by the public through the links provided in this document.

To use some of the digital files offered by some of the sources listed below, a data sharing agreement or review of the data standards document may be required. The file formats offered on most of these sites are google earth compatible (.kml and .kmz), QGIS and ArcGIS compatible (.shp) and AutoCAD compatible (.dwg). The web map service files are WMS and are usually embedded in a link.

Mapping or data browsers within this document are either run by the province, engineered by ArcGIS online, or are part of an open data source called Canadian Data. Downloading the layers from map browsers may be in a WMS open data format **or** contained in a zipped file, holding in the format you choose. Not all browsers have shapefiles available. I tried to identify the ones that have .kml or .kmz only, where you will need to convert to a shapefile once you download.

The following links are recent as of February 2024. You may want to check to see if there are more current versions of the data at each link prior to its use.

When using any of the data in your maps whether shapefiles, KMLs, open source or WMS links, you must acknowledge where the information came from. Sourcing the information is always a good idea, your maps are only as good as the data you are using.

CANADA – DIGITAL LAYERS

Resource	Source	Description
Survey Plan Search User Guide	NRCan	Beyond Boundaries – Survey Plan Search User Guide in a PDF format to download. This guide offers numerous links and options to get the most out of all types of survey plans and the search tools are also explained very well.
Plan Search Tools	NRCan	Plan Search Tools – This page was built to assist in choosing the right tool to assist you in finding the plans and surveys you require.
Survey Plan Search	NRCan	Survey Plan Search Tool - Search your plans by Keyword, plan number or SGB project number. This is one example of a Plan Search tool mentioned in the Guide.
Natural Resources Canada	NRCan	This site offers all links associated with Canada's Natural Resources. Specializes in storing and maintaining the cadastral fabric spatial data of all Indian Reserves, Parks and the Territories.
Canada Lands in Google Earth Canada Lands in Google Earth User Guide	NRCan	This site allows you to download the Canada Lands Overlay in a Google Earth format (KMZ). One file for all of Canada. Best to download the Canada Lands then refer to this guide before using the tools suggested. This is in a PDF format.
Canadian Geographical Names	NRCan	This is a link to files of official geographical names for individual provinces and territories, as well as for the Maritimes offshore. These are available in Text, .SHP Shape file and .KML Google Earth formats. Files are zipped.
Natural Resources SGB Data	NRCan	For GIS users: This FTP site holds all reserve digital admin boundaries and reserve parcel line work, in .SHP and .DWG format. You should know the reserve name before accessing this site, there is no map to assist you. You will need to use Microsoft Edge rather than Google Chrome.
Canada's Spatial Data Infrastructure	Government of Canada.	There are several links on this page that give you important information on Geo-Connection's standards-based technologies and operational policies. Go to "Topographic Tools and Data" for information on other resources available across Canada. Various Scales available, be aware.
Canadian Open Data and Free Geo spatial Data	Government of Canada.	Various cities and provinces in Canada have done a great job providing <i>Open Geospatial Data</i> and geospatial applications to this site. You will see a map on top of page of this site, select your province or scroll down and select from the tabs provided. There will be a long list of URLs, for each province, best to try out all the URL's to see what data is right for you.
National Road Network FTP Site	Government of Canada.	For GIS users, this FTP site holds, by province, the digital layer of roads in .KML, .GML and .SHP (Shape File) formats, French and English options available.
Government of Canada FTP Site Topographic Raster Maps	Government of Canada.	For GIS users, this FTP site holds Raster NTS maps at a 1:50K scale that you can use for a backdrop or for reference in finding geographic names of roads or rivers. You should know the name of your NTS map sheet needed before going to this site, e.g. 092/O/16. No index available. You will need to use Microsoft Edge rather than Google Chrome.

BC – DIGITAL LAYERS

Resource	Source	Description
Data Catalogue	BC Government	The BC Data Catalogue provides the easiest access to government's data holdings, as well as applications and web services. Thousands of the datasets discoverable in the Catalogue are available under the Open Government License - British Columbia. Some KML and SHP but most are the WMS for digital mapping. Multiple files, use search engine! May need to signup for an IDIR account.
iMapBC	BC Government	iMapBC is a map and data browser. This site opens to a Map of BC. You can access and explore thousands of digital map layers of the BC Government and other public sector agencies. This is a good tool to view the data before you download from the BC Data Catalogue. You can also design your own map, save as an image, and print from here. Any work created today cannot be saved for future reference, to keep map, use export.
Integrated Cadastral Information Society	ICI Society in BC	The ICI Society facilitates the sharing of location intelligence data – which leads to better decisions and better outcomes for its members and their stakeholders, the people of BC. To get access to map viewer and data you need to sign up as a member.
Maps & Ortho Photo Store	BC Government	The Base Map Online Store (BMOS) allows you to search, display, and order orthophoto imagery, raster, and vector data. Use the search tools in the main menu bar to find a map sheet tile, geographic place name, or address. There are free products on this site as well. You will need to use Microsoft Edge.
The Weather Network	The Weather Network	The TWN delivers weather information to several media sources, TV, digital platforms such as mobile apps. TWN gives up to date on the minute temperatures, precipitations and wind velocity. They are dedicated to delivering information that really matters, 24/7.
Fire & Smoke Forecast	ESRI USA & CANADA	This Fire and Smoke map shows information on current fires burning and the areas affected by the smoke.
Climate Change Mapping	CLIMATE ATLAS CANADA	The Climate Atlas of Canada combines climate science, mapping and storytelling together with indigenous knowledges and community-based research and video to inspire awareness and action.