



# 2018

## HOW TO GUIDE – NAVIGATING THROUGH OPEN DATA CATALOGUE PLATFORMS

For Environment and Climate Change Canada's Shoreline classification datasets

2018-04-12

National Environmental Emergency Centre  
Environmental Protection Operations Directorate  
Environmental Protection Branch

Centre national des urgences environnementales  
Direction des activités de protection de l'environnement  
Direction générale de la protection de l'environnement

Cover photo: © GettyImages.ca

Aussi disponible en français

# TABLE OF CONTENTS

1.	Objective and Application .....	1
2.	Method Summary.....	1
3.	Definitions.....	1
4.	Material and Supplies.....	1
5.	Procedure .....	2
5.1	Opening the web platform .....	2
5.2	Open Governmental Portal .....	3
5.3	Environment and Climate Change Canada Data Catalogue.....	5
5.4	Downloading and viewing the data.....	7

# 1. OBJECTIVE AND APPLICATION

The objective of this guide is to help users better understand Environment and Climate Change Canada's Data Catalogue as well as Canada's Open Government Portal for open data. This guide takes the user through both interfaces and explains the main steps required when downloading datasets using a geographic information system (GIS).

## 2. METHOD SUMMARY

- Opening the web platform;
- Understanding the various resources<sup>1</sup> available;
- Downloading and viewing the data.

## 3. DEFINITIONS

Open data	Structured data that is machine-readable <sup>2</sup> , freely shared, used and built on without restrictions.
FGDB	A File Geodatabase is a collection of files in a folder on disk that can store, query, and manage both spatial and nonspatial data <sup>3</sup> .
GIS	A geographic information system (GIS) is a system designed to capture, store, manipulate, analyze, manage, and present all types of geographical data (i.e. referenced to locations on the earth) <sup>4</sup> .
QGIS	Quantum GIS
SCAT	Shoreline Cleanup Assessment Technique
WMS	Web Map Service

## 4. MATERIAL AND SUPPLIES

- Open Government Portal(<https://open.canada.ca/data/en/dataset>)
- Environment Canada Climate Change Data Catalogue (<http://donnees-data.intranet.ec.gc.ca/geonetwork/browse/eng>)
- A GIS, such as ESRI's ArcGIS or [QGIS](#) (for opening geographic data—in FGDB format)

---

1 The term resources here, refers to the available assets to further help and inform the users with the chosen data.

2 Machine-readable: In a form that can be used and understood by a computer.

3 ESRI (2016). What is a file geodatabase?, [online] <http://desktop.arcgis.com/en/arcmap/10.3/manage-data/administer-file-gdbs/file-geodatabases.htm>. Consulted on 2018-09-11.

4 University of Wisconsin-Madison Libraries (s.d.). Mapping and Geographic Information Systems (GIS): What is GIS? —Information on Maps/Mapping & Geographic Information Systems (GIS), [online] <https://researchguides.library.wisc.edu/GIS>. Consulted on 2019-01-08.

## 5. PROCEDURE

### 5.1 OPENING THE WEB PLATFORM

The shoreline segmentation with *Shoreline Cleanup Assessment Technique (SCAT)* classification is the shoreline data collection. You can find the link to this collection and related products in Table 1.

Table 1 Web links to ECCC's shoreline data collection

Open Government Portal	Environment Canada Data Catalogue
<a href="#">Shoreline Segmentation with Shoreline Cleanup Assessment Technique (SCAT) Classification</a>	<a href="#">Shoreline Segmentation with Shoreline Cleanup Assessment Technique (SCAT) Classification</a>
<a href="#">Atlantic Shoreline Classification</a>	<a href="#">Atlantic Shoreline Classification</a>
<a href="#">Ontario Shoreline Classification</a>	<a href="#">Ontario Shoreline Classification</a>
<a href="#">Quebec – Saint-Lawrence River – Shoreline Classification</a>	<a href="#">Quebec – Saint-Lawrence River – Shoreline Classification</a>
<a href="#">Northern Canada Shoreline Classification</a>	<a href="#">Northern Canada Shoreline Classification</a>
<a href="#">North Coast of British Columbia Shoreline Classification</a>	<a href="#">North Coast of British Columbia Shoreline Classification</a>

Each link in Table 1 redirects to the region-specific webpage. The following guide uses the *Atlantic Shoreline Classification* for visual examples but note that the format is the same for every region. [Section 5.2](#) of this guide explores the Open Governmental Portal, and [section 5.3](#) explores the Environment and Climate Change Canada Data Catalogue<sup>5</sup>.

---

<sup>5</sup> Resources available on ECCC's Data Catalogue are the same as those on the Open Governmental Portal, although they are meant for ECCC employees to access the information on their departmental platform.

## 5.2 OPEN GOVERNMENTAL PORTAL

The screenshot shows the 'Atlantic Shoreline Classification' metadata page. At the top, there is a header with the Government of Canada logo and a search bar. Below the header is a navigation menu with links for Jobs, Immigration, Travel, Business, Benefits, Health, Taxes, and More services. The main content area is titled 'Atlantic Shoreline Classification' and contains a detailed description of the dataset. A 'View on Map' button is highlighted with a red box. The right-hand sidebar contains a 'Have your say' section with a rating system and a 'Comment(s)' link, an 'Additional Information' section with creator and contact details, and a 'Keywords' section with a list of related terms. The 'View on Map' button is also highlighted with a red box.

Figure 1.1. Shoreline Classification Metadata webpage on the Open Government Portal

### 5.2.1. Understanding the various resources available

When selecting any of the Open Government links above, a webpage will open with the format shown in figure 1.1 above.

Following the title in the main window, there is a description of the shoreline data. Below are three subsections: *Resources* (section 5.2.2), *Geographic Information*, and *Contact Information*. Users can also refer to the right-hand sidebar for additional information on the data.

All metadata is available in both English and French. Click the *Français* link on the top right corner of the webpage to switch to French (or vice-versa).

#### [View on Map](#)

Below the Metadata description (Figure 1.1), the *View on Map* (Figure 1.2) button redirects to the *Open Maps Data Viewer* allowing **visualization** of the shoreline data.

Note: The map is at a national scale. *Zoom-in* to the specific region (i.e. Atlantic) to better visualize the segments and their classification. To do so, scroll *up* or *down* with the mouse wheel, or use the *zoom in* or *zoom out* buttons in the bottom-right corner of the map (Figure 1.2).

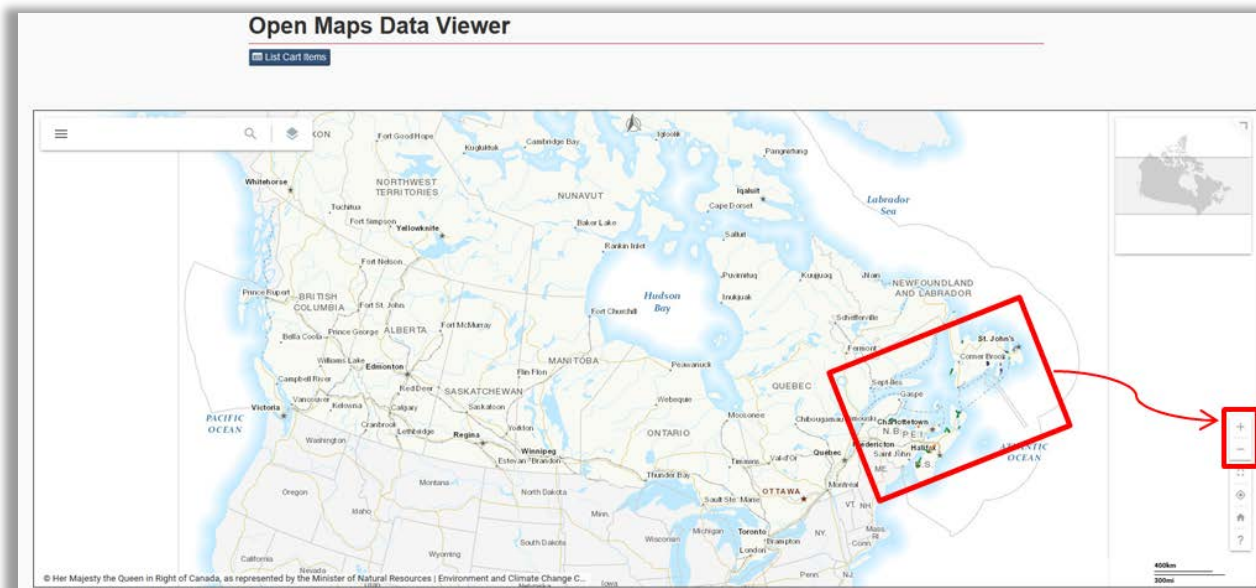


Figure 1.2. Open Maps Data Viewer

## Geographic Information

This box shows the extent covered by the data but does NOT show actual segmentation. To do so, refer to the above information ([View on Map](#)) or to [section 5.4](#) below.

## Contact Information

Use this contact for more information on the data. Point of contact can also be found in the right-hand sidebar. For technical issues, please contact Data Management ([ec.gestiondonnees-datamanagement.ec@canada.ca](mailto:ec.gestiondonnees-datamanagement.ec@canada.ca)).

### 5.2.2. Resources

Available resources are Web Services (i.e. JSON, XML, HTML) and Datasets (i.e. CSV, FGDB).

See the following [link](#) to better understand and use these formats.

Resources			
Resource Name	Resource Type	Format	Language
Atlantic Shoreline Classification	Web Service	ESRI REST	English
Atlantic Shoreline Classification	Web Service	ESRI REST	French
Atlantic Shoreline Classification	Web Service	WMS	English
Atlantic Shoreline Classification	Web Service	WMS	French
ShorelineClassification_AR.csv	Dataset	CSV	English French
ShorelineClassification_AR_OpenDataCatalogue.gdb.zip	Dataset	FGDB/GDB	English French
View ECCC Data Mart (English)	Web Service	HTML	English
View ECCC Data Mart (French)	Web Service	HTML	French

Figure 1.3. Shoreline Resources

## 5.3 ENVIRONMENT AND CLIMATE CHANGE CANADA DATA CATALOGUE

The following section introduces ECCC's Data Catalogue. The content of this platform is the same as the previous, only the design differs. This section allows ECCC users to access the previous information on their departmental platform.

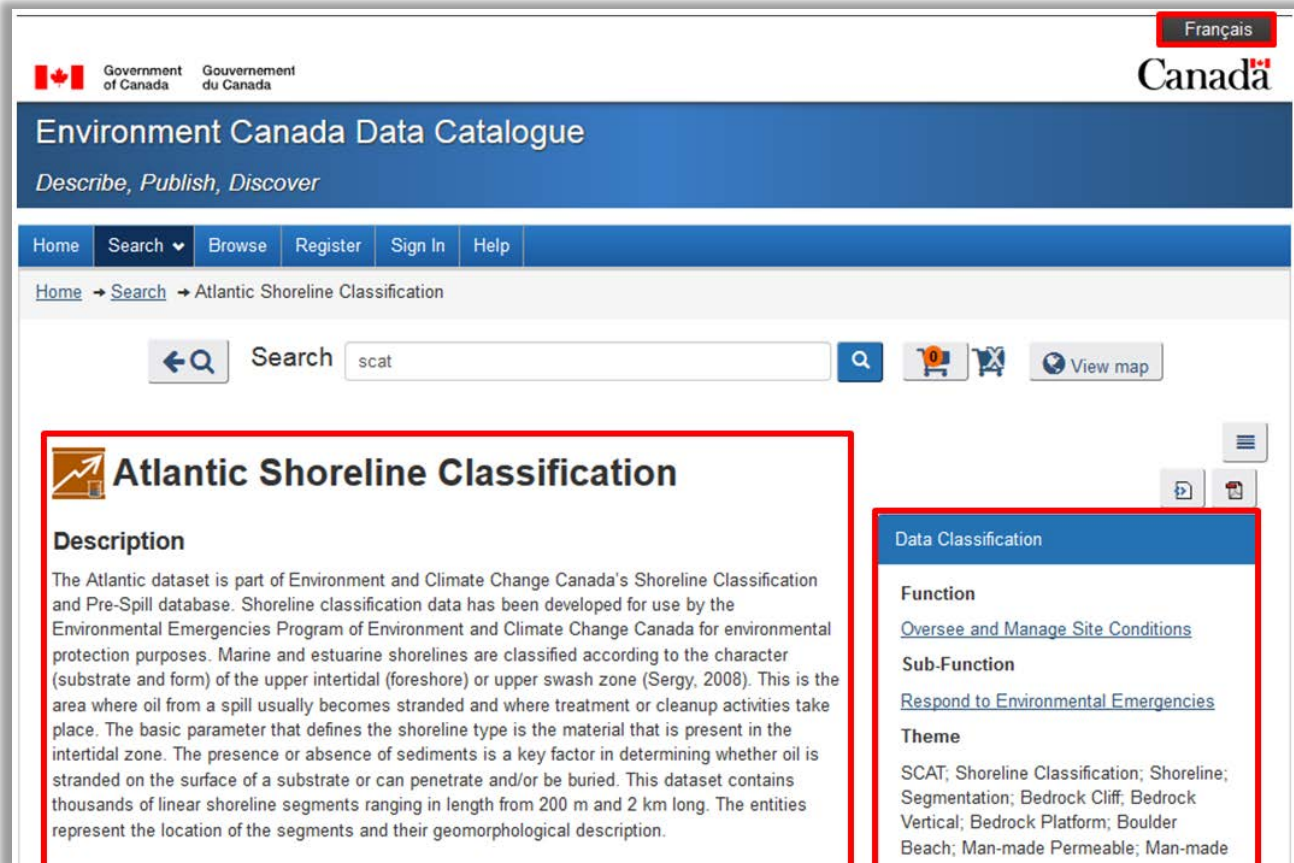


Figure 2.1. Shoreline Classification Metadata webpage on the Environment Canada Data Catalogue

### 5.3.1. Understanding the various resources available

When selecting any of the ECCC Data Catalogue links in [section 5.1](#), a page opens as shown in Figure 2.1 above.

In the main window, following the title, there is a description of the shoreline data. Below there are three subsections: *Map Resources* (section 5.3.2), *Parent Collection*, and *Additional Information*. Users can also refer to the right-hand sidebar for more information on the data.

All metadata is available in both English and French. Click the *Français* link on the top right corner of the webpage to switch to French (or vice-versa).



## Map Navigation

Below the description, the *Canada Base Map* (Figure 2.2) allows **visualization** of the data extent.

Note: This box only shows the extent covered by data, there is no shoreline segmentation. Zoom in and out by scrolling *up* or *down* with the mouse wheel or by using the *zoom in* or *zoom out* buttons in the top-left corner of the map. The “home” button resets map to the initial extent.

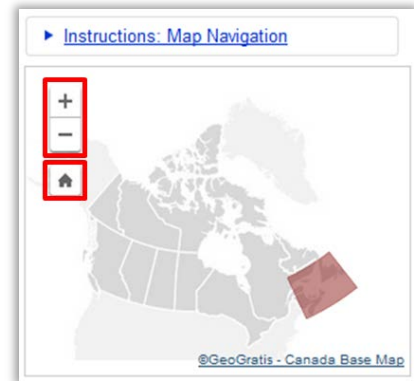


Figure 2.2. Map Navigation

## Parent Collection

This collection groups all shoreline segmentations with SCAT classification. By clicking on the link, the webpage is redirected to a list of all data and metadata available (currently 5 covered areas).

## Additional Information and Right-hand Sidebar

These sections hold more information on the data and metadata, as well as the point of contact<sup>6</sup>.

### 5.3.2 Resources

Available resources are Web Services (i.e. JSON, XML, HTML) and Datasets (i.e. CSV, FGDB).

See the following [link](#) to better understand and use these formats.

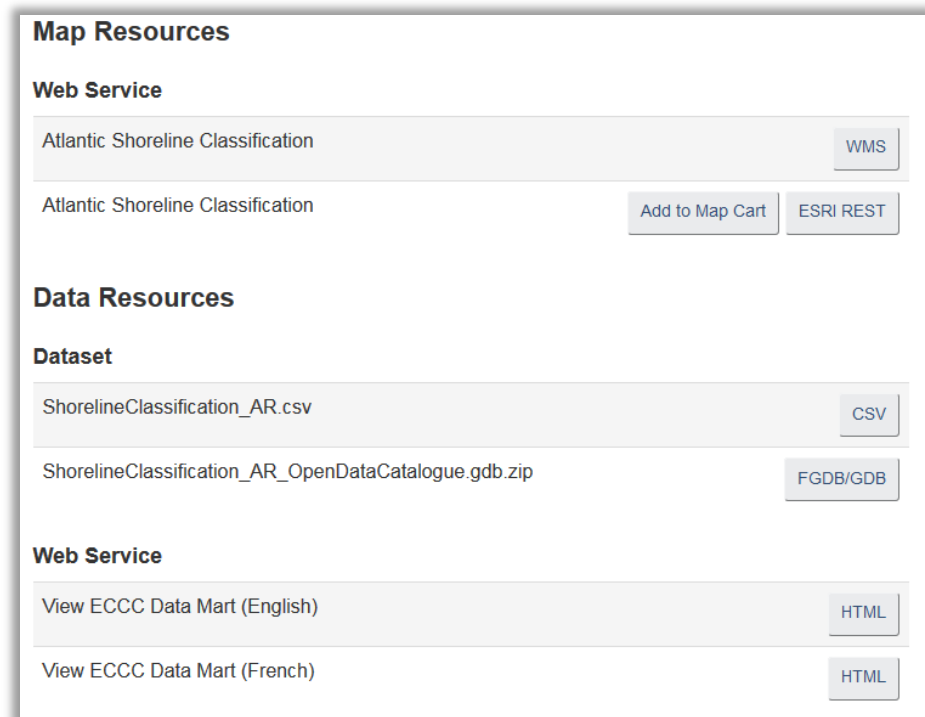
A screenshot of a sidebar titled "Map Resources". It is divided into two main sections: "Web Service" and "Data Resources". Under "Web Service", there are two entries for "Atlantic Shoreline Classification": one with a "WMS" button and another with "Add to Map Cart" and "ESRI REST" buttons. Under "Data Resources", there is a "Dataset" section with two entries: "ShorelineClassification\_AR.csv" with a "CSV" button, and "ShorelineClassification\_AR\_OpenDataCatalogue.gdb.zip" with an "FGDB/GDB" button. Below the dataset section, there is another "Web Service" section with two entries: "View ECCC Data Mart (English)" with an "HTML" button, and "View ECCC Data Mart (French)" with an "HTML" button.

Figure 2.3. Shoreline Resources

---

<sup>6</sup> For technical issues, please contact [Data Management](#). For questions related to the scientific information behind the data, please use the following email address: [ec.cnuesig-gisnec.ec@canada.ca](mailto:ec.cnuesig-gisnec.ec@canada.ca)

## 5.4 DOWNLOADING AND VIEWING THE DATA

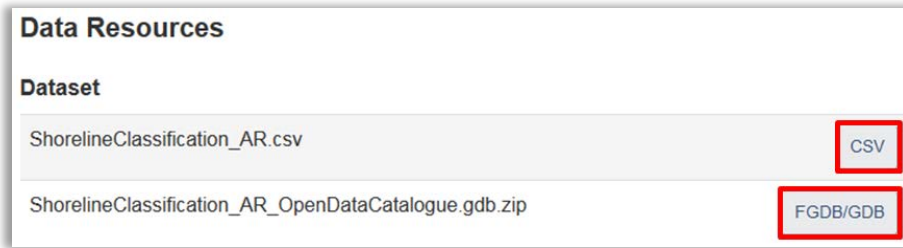


Figure 3.1 Data Resources

### With an ESRI ArcGIS Desktop Licence

1. Click on the “FGDB/GDB” button and *Save File* in your project’s directory;
2. Go to that directory and unzip the downloaded file (i.e. “Extract...”);
3. Once extracted, the geodatabase and its content can be viewed and manipulated through ArcCatalog, ArcGIS and any ESRI application.

### With a Quantum GIS Licence (Download the QGIS app—see [section 4](#) above)

1. Click on the “CSV” button and *Save File* in your project’s directory;
2. Open QGIS;
3. Click on “Data Source Manager” button as show on Figure 3.2;
4. The following dialog will open. Fill in as follows:

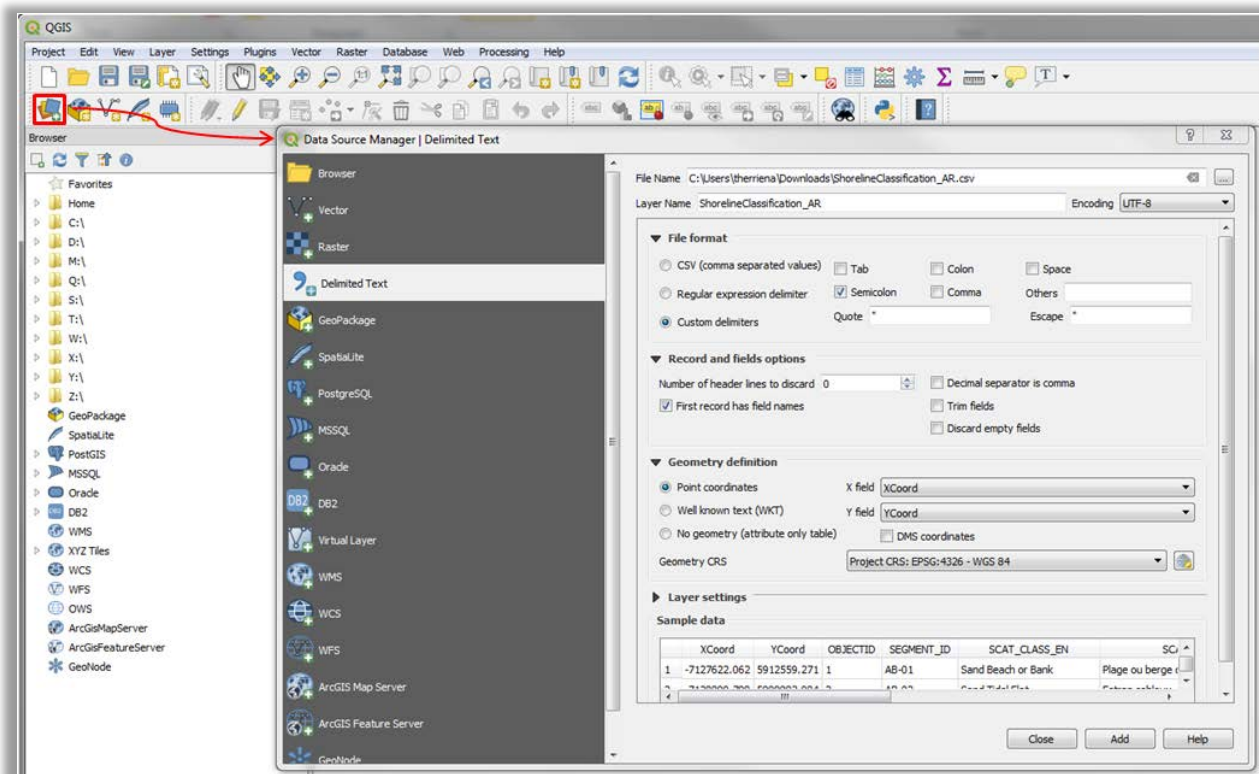


Figure 3.2 Data Source Manager

5. Click "Add" and the layer will be added to the left-hand panel (Figure 3.3)  
(if unavailable, select *View* → *Panels* → *Layers Panel*);
6. Right-click the added CSV layer in the *Layers* panel and select *Save as...*
7. The following dialog will open:

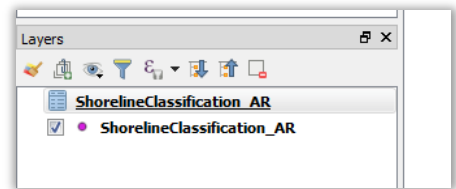


Figure 3.3 Layers Panel

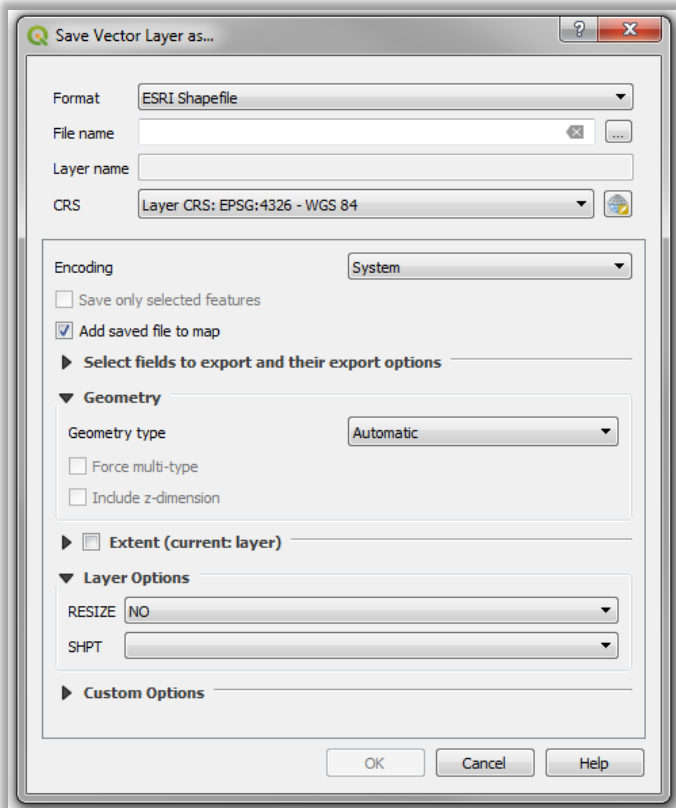


Figure 3.4 Save Vector Layer as...

8. Give the file a name and complete as shown in Figure 3.4. Click *OK* and the resulting Shapefile (.shp) can be edited.

For technical issues with the data format and online platforms, please contact Data Management ([ec.gestiondonnees-datamanagement.ec@canada.ca](mailto:ec.gestiondonnees-datamanagement.ec@canada.ca)) for assistance.

For more information about the science behind the shoreline data or in regards to the SCAT process, please feel free to contact us ([ec.cnuesig-gisneec.ec@canada.ca](mailto:ec.cnuesig-gisneec.ec@canada.ca)).