



# BC Economic Atlas

User Guide

October 2018

Ministry of Jobs, Trade and Technology

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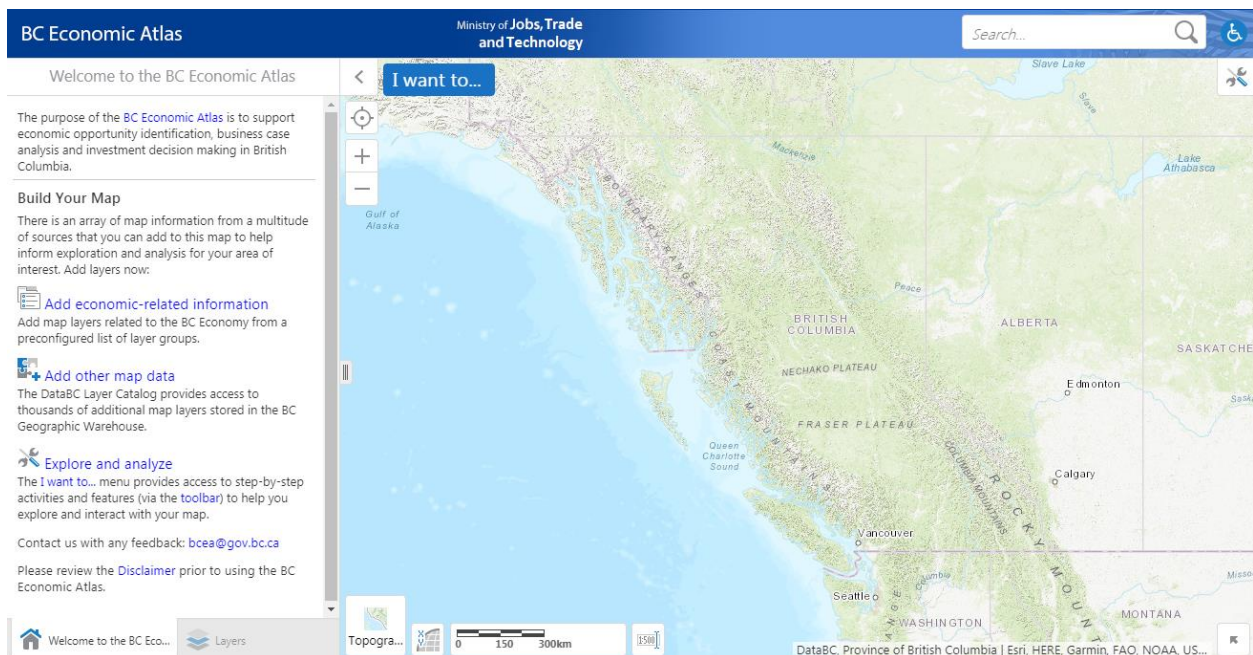
# 1 INTRODUCTION

The new **BC Economic Atlas (BCEA)** interactive map viewer is designed to work across all modern browsers as well as mobile and tablet devices! BCEA integrates and displays spatial economic and natural resource data to support business and investment opportunity identification, business case analysis and business and investment decision-making in BC.

The **BC Economic Atlas** improves the way we:

- Access spatial information from multiple sources;
- Identify, visualize and promote business opportunities;
- Conduct project scoping and business case analyses; and
- Facilitate informed business and investment decision conversations.

This **User Guide** is meant to provide users with a basic understanding of BCEA including: how to get started, interacting and adding map layers, searching map features, exporting results, and creating and sharing printable maps and reports.



## 2 QUICK START

- Read the [Disclaimer](#) link prior to using the BCEA.
- Open the BC Economic Atlas from the launch link at [www.gov.bc.ca/economicatlas](http://www.gov.bc.ca/economicatlas)
- Click on the map to find more information about the features that are displayed.
- Double click on the map to zoom in or roll your mouse-wheel forward.
- Click and drag the mouse on the map to move the map image.



**Add economic-related information** Add map layers related to the BC Economy from a preconfigured list of layer groups.



**Add other map data** The DataBC Layer Catalog provides access to thousands of additional map layers stored in the BC Geographic Warehouse.



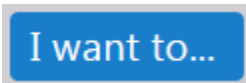
Opens and closes the **toolbar** which offers additional tabs and features to help you explore and interact with the map.



Clicking the home icon returns you to the home panel. This screen provides links to the BCEA homepage and disclaimer as well quick links for accessing map layers, toolbars and the **I want to...** menu. Use the **<** and **>** icons to toggle the visibility of the home panel.



Click the layers button at **the bottom left of your screen** to turn layers on and off, perform layer actions and to access the legend. Light grey text indicates the layer is not visible at the current scale.



Click this menu to access a drop down of the most commonly used tools.



Use the search bar in **the top right of the screen** to search the map for features, place names or addresses.



Zoom in



Zoom out



Click to find your location (Note – the geolocation feature works best with Chrome or Firefox or on a mobile device).

### 3 BC ECONOMIC LAYER MENU

The **BC Economic Layer Menu** is the primary way to add and remove map layers from the BC Economic Atlas. The economic layer menu contains map layers related to the BC economy from a preconfigured list of layer groups.

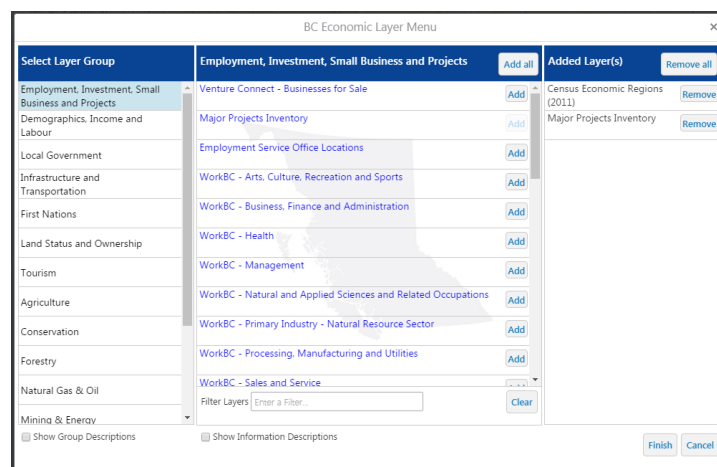
To access the **BC Economic Layer Menu**:

- Click the **Add economic-related information** link on the home panel; or
- Click **Add economic-related information** in the **I want to...** drop down; or
- Click the **BC Economic Layer Menu** icon on toolbar in the **Maps & Data** tab.

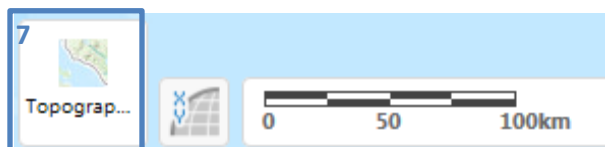
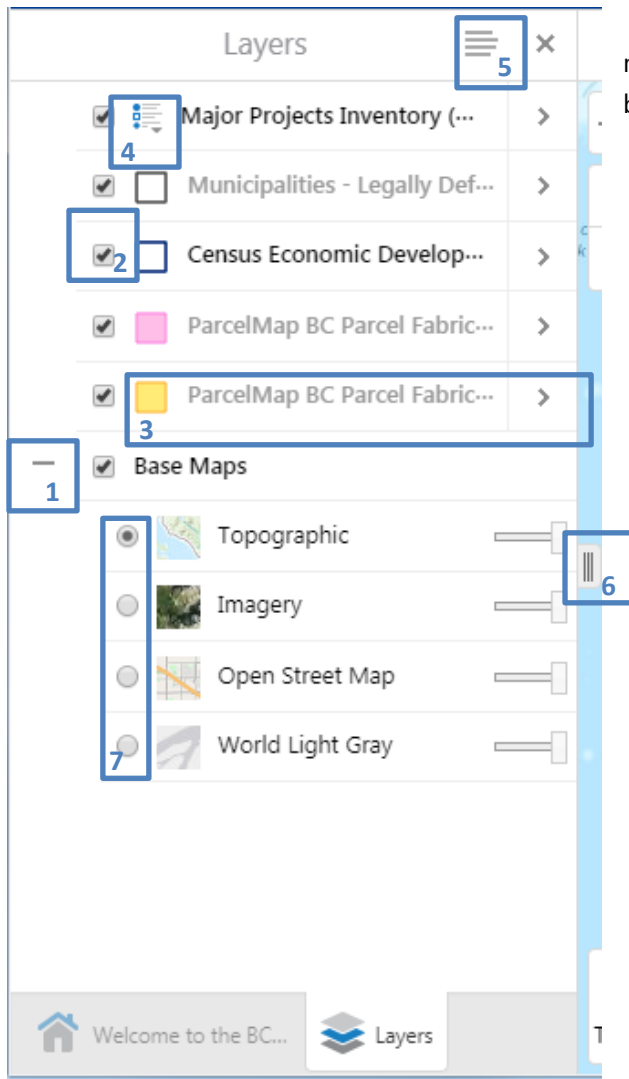
The **BC Economic Layer Menu** is organized with **Layer Groups** in the left column organized by themes related to economic development.


To use the **BC Economic Layer Menu**:



- Select the layer groups in the left column to show the available layers in the centre column;
- Click **Add** to add layers individually or **Add All** to add all the map layers from the active layer group;
- Toggle between different layer groups to add map layers of interest to build your map. Selected map layers appear in the **Added Layer(s)** column on the right.
- Note: For more information about layer groups or map layers select the check box for **Show Group Descriptions** or **Show Information Descriptions**.
- Click **Finish** on the bottom right of the layer menu to add the layers to the map.
- Click **Remove** from **Added Layer(s)** column on the right to remove layers individually or select **Remove All**. Click **Finish** on the bottom right to commit the changes to your map.



## 4 MAP LAYERS

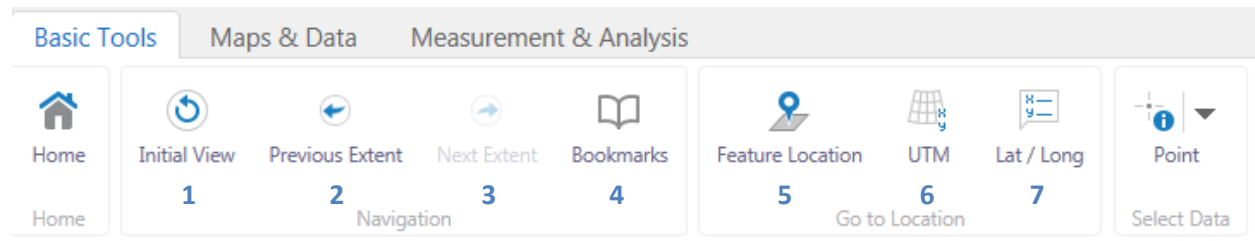


To view the list of map layers you have loaded on the map click the layers icon  (located on the bottom left of the screen or in the **I want to...** menu).

- 1) Press the  $-$  and  $+$  symbols to collapse or expand Base Maps.
- 2) Use the check boxes to turn layers on or off.
- 3) Light grey names indicate the layer will not draw at the current map scale. Zoom in until the layer appears or click the  $\triangleright$  icon next to each layer name. This will allow you to  **Zoom to visible scale**
- 4) Click legend icon  to see additional legend information for layers that are symbolized by unique values.
- 5) The Panel Actions Menu will display a tool to **Show Legend**. Legend symbology will be shown for any layer that is turned on and drawing at the current scale. This is also what will be used in the print templates.
- 6) Drag right or left to resize the panel.
- 7) You can quickly toggle between base maps by using the radio buttons or by using the base maps button on the bottom left of the map viewer.

## 5 HOW DO I...?

### 5.1 Getting Around the Map



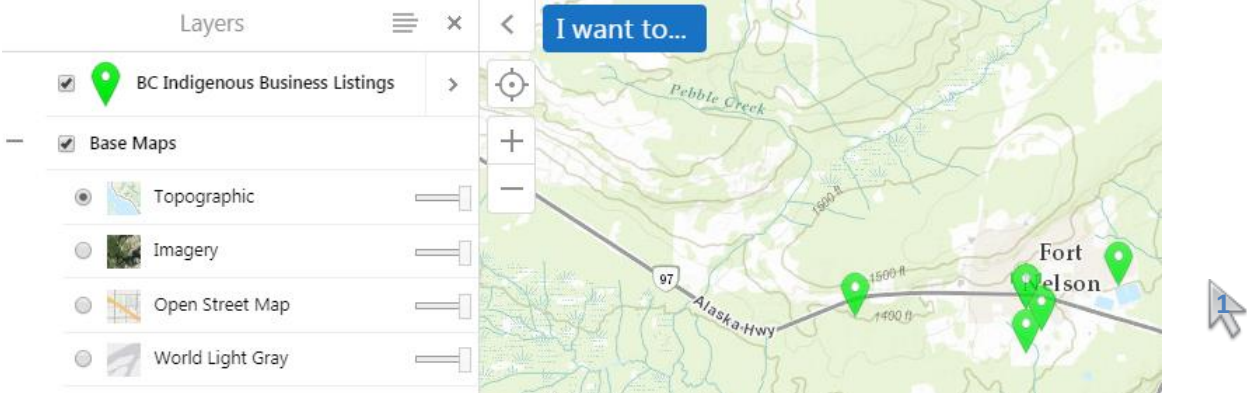
Open the **Basic Tools** tab on the toolbar. To do this: double-click the blue header image at the top of the screen, click the **toolbar** link on the home panel, click the toolbar icon in the top right corner of the map

viewer or find the toolbar  icon in the **I want to...** menu.

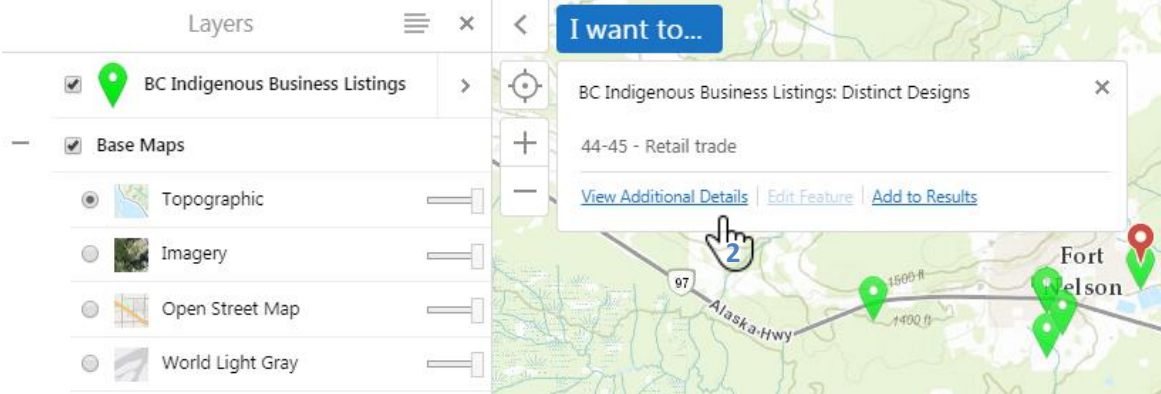
- 1) **Initial View** - Return the map to the initial map view (extent), i.e., zoom out to see all of British Columbia.
- 2) **Previous Extent** - Zoom to the previous extent.
- 3) **Next Extent** - Moves the map forward to the extent that was selected prior to using the Previous Extent tool.
- 4) **Bookmarks** - Create a bookmark for the current map extent. The bookmark is stored in your internet browser cache and can be found here any time you access the **BC Economic Atlas** (note: currently Bookmarks seem to work best in non-Chrome browser environments).
- 5) **Feature Location** - Zoom to a specific location from a custom list of locations in BC, e.g., Municipality, Tree Farm Licence, or First Nation Community etc.
- 6) **UTM** - Zoom to specific coordinates based on the Universal Transverse Mercator project system.
- 7) **Lat/Long** – Zoom to specific Latitude/Longitude coordinates.

## 5.2 Search by Selecting Features on the Map

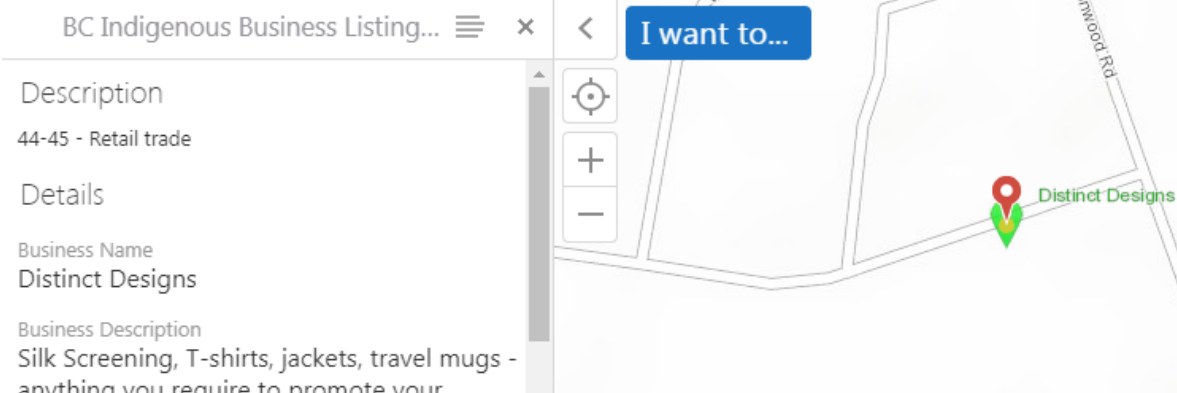
1. Click on the features on the map using the left mouse button to see more information.



2. Click View Additional Details

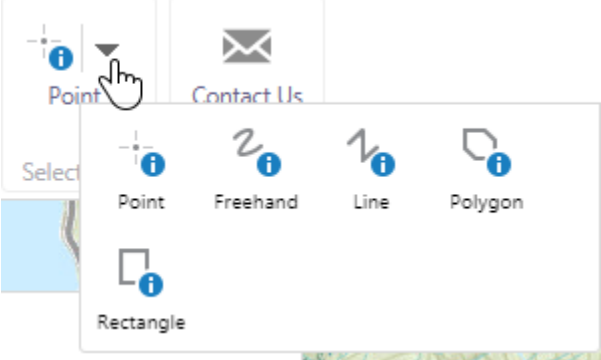
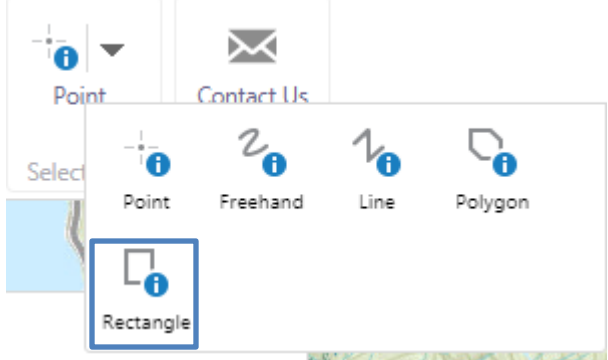

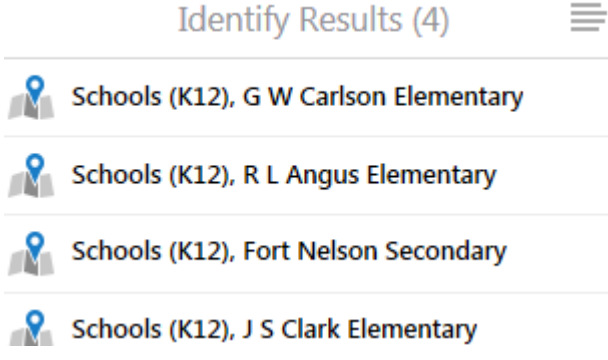
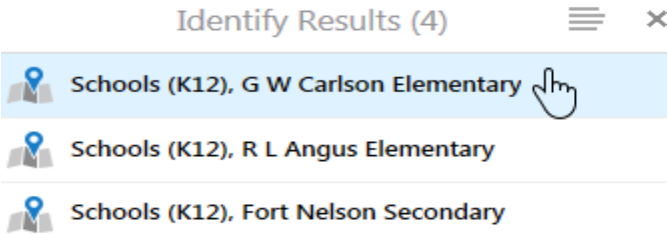
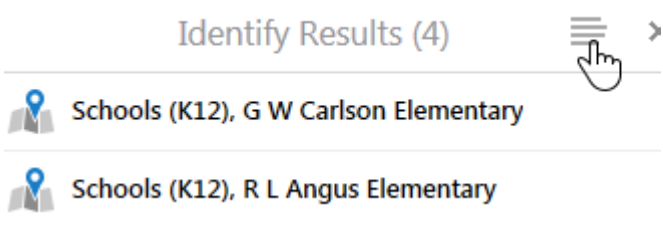


3. Review Feature Details on the left side panel.



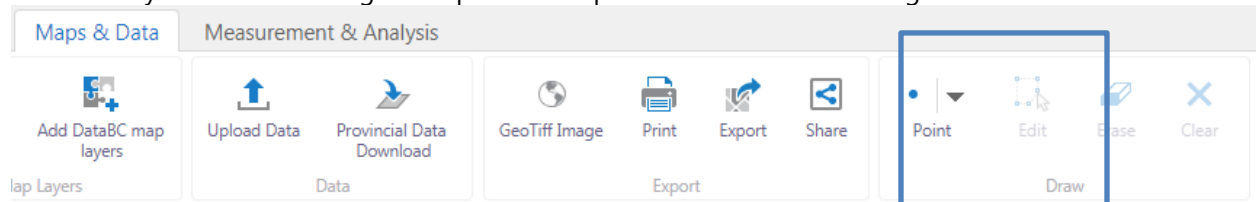


The **Select Data** tools on the **Basic Tools** tab can also be used to search features. Results will be returned for any visible features that intersect the shape you draw on the map.

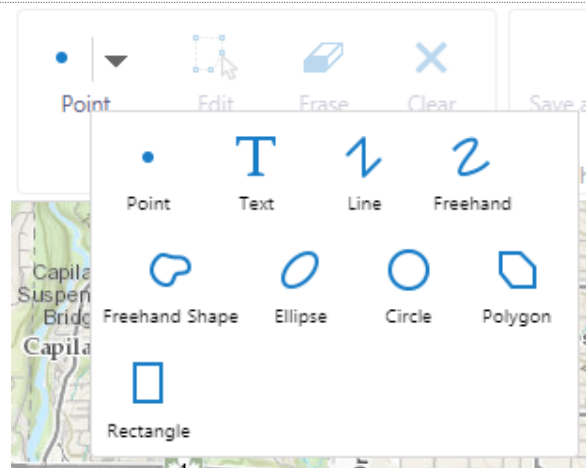
<p>1) Click the dropdown next to the Point identify</p> 	<p>2) Select a shape to search by, e.g. Rectangle</p> 
<p>3) Click on the map and draw a shape over the features you want to search</p> 	<p>4) The results of the search are returned on the details panel on the left</p> 
<p>5) Click the results for a specific feature to show more details about that feature</p> 	<p>6) Click the <b>Panel Actions Menu</b> to view the results in a table view, <b>export the features</b> to csv, xlsx or to identify nearby features <b>Show Buffer Options</b></p> 

### 5.3 Draw on the Map ↴

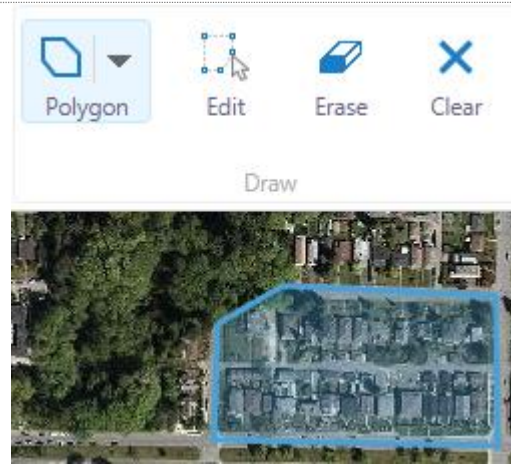
Open the **Maps & Data** tab on the toolbar. To do this: double-click the blue header image at the top of the screen, or click the **toolbar** link on the home panel, or click the toolbar icon in the top right corner of the map viewer or find the **toolbar** icon in the **I want to...** menu. Click the **Maps & Data** tab. The **Draw** tools allow you to add drawing markup to the map and are located on the right side of the toolbar.



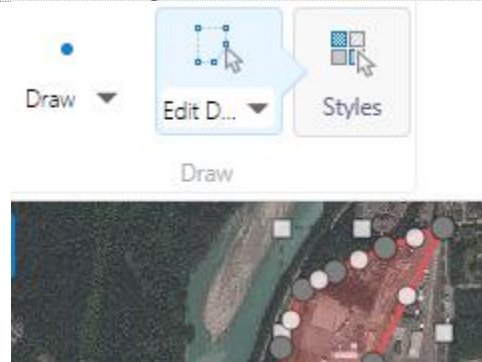
1) Click the drop down next to the **Point** icon to show the draw options;



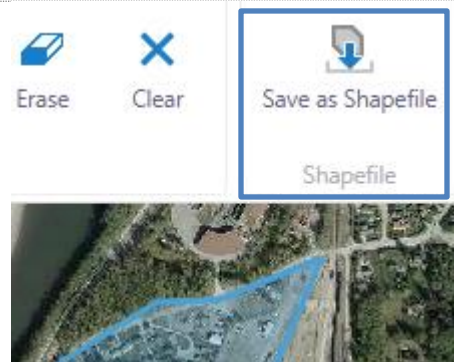
2) Select the type of custom shape or text you would like to add to the map, e.g., Polygon. Click on the map to define the shape. Double-click to finish;



3) To change the shape or text click the **Edit** tool and select shape or text you wish to edit. To erase the drawing click **Erase**. To delete all drawings click **Clear**.



4) To export your drawing(s) to a GIS Shapefile (.shp) click **Save as Shapefile**. Click Ok to Confirm download.



## 5.4 Query and Filter Features on the Map

**Query** and **Filter** can be found in the **Measurement & Analysis** tab on the toolbar. **Query** selects features that meet the criteria. **Filter** removes features from the selected layer that do not meet the filter criteria. Choose from the following options to query or filter features on the map:

Query x

Data Source:  
BC Indigenous Business Listings

Industry Sector (NAICS) = '11 - Agriculture, forestry, fishing and hunting' x  
Add Another Condition

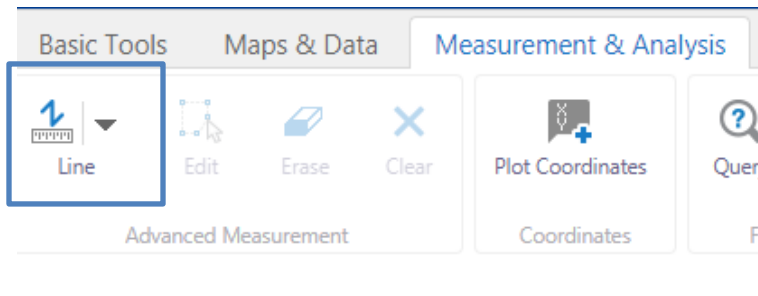
Spatial Filter:  
None

Search

1. Choose a Data Source to perform the query/filter on
2. Create a query/filter definition based on the field name and value or condition you are interested in
3. Click **Add Another Condition** to add another definition
4. Leave **Spatial Filter** as is or choose **Current Extent** to query/filter the area seen in the map viewer only
5. Click **Search**.

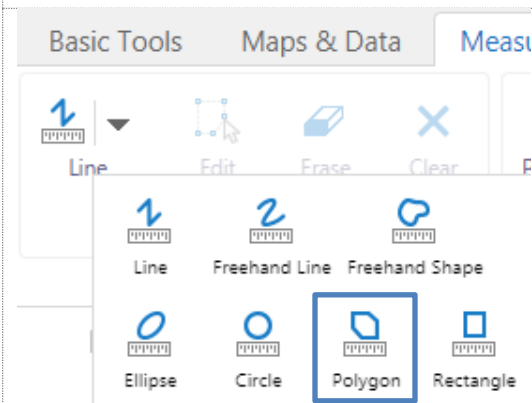
## 5.5 Make Measurements on the Map

The **Advanced Measurement** tools are very similar to the **Draw** tools. The main difference is the measurement tools allow for both linear and area-based measurements on the map. Linear measurements can be taken in **meters, feet, yards, kilometers, miles** and **nautical miles**. Area-based measurements can be taken in **feet<sup>2</sup>, yard<sup>2</sup>, meter<sup>2</sup>, kilometer<sup>2</sup>, mile<sup>2</sup>, nautical mile<sup>2</sup>, acres<sup>2</sup>** and **hectares<sup>2</sup>**.

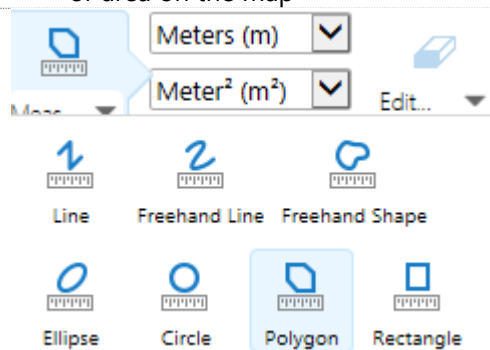


Measurement tools are available in the **Measurement & Analysis** tab on the toolbar.

- 1) Click the drop down next to the **Measure** icon to show the measure options. Click a measurement type, e.g., Polygon



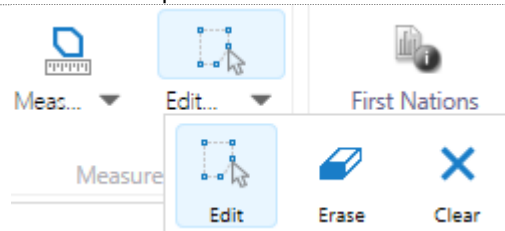
- 2) Once a measurement type is selected the measurement units drop downs appear. Select appropriate measurement unit. Draw the line or area on the map



- 3) The measurement units can be changed once the shape has been added using the measurement units drop downs

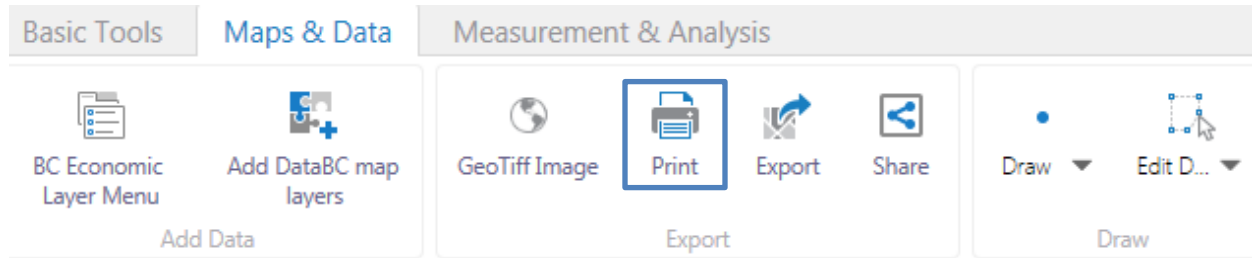


- 4) The calculated area shape or line can be edited or erased using the **Edit** or **Erase** tool on the Edit drop down



## 5.6 Create a Printable Map

Click the **Print** tool on the **Maps & Data** tab. This tool will allow you to create a map in a range of formats including: **PDF, RTF, TIFF, BMP, GIF, JPEG, or PNG.**



You can select different print layouts including two default layouts (landscape or portrait) which include a map legend and the ability to customize the map title. Map only layouts allow you to create maps in a range of different sizes without including a title or legend.

Print Map ×

Select Layout  
Default Landscape - 11x17 (with legend) ▼

Output Format  
Pdf ▼

Map Scale  
Current Scale - 1: 18056 ▼

Title  
BC Economic Atlas

Datum  
NAD83

Lock print preview with map

Print Cancel

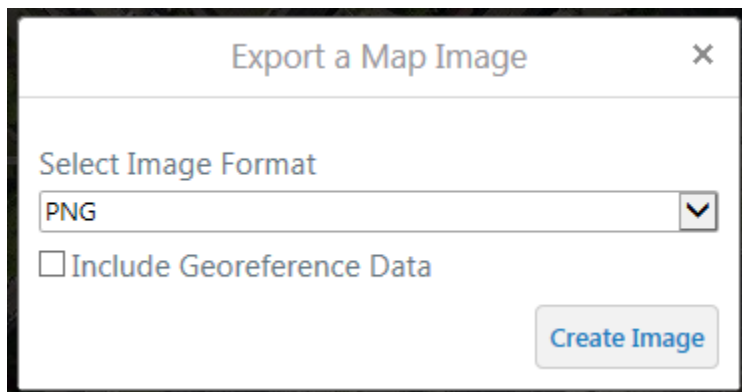
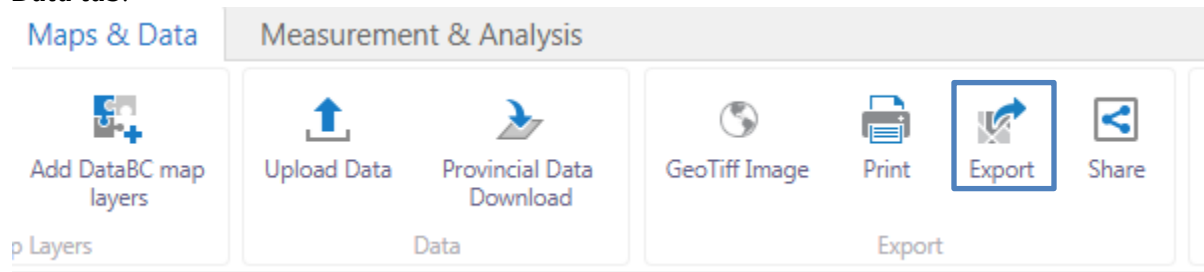
To print:

1. Choose a layout (**Default** layouts include title and legend, **Map Only** layouts do not)
2. Change or keep current **Map Scale**
3. Change or keep the **Map Title** (only for Default Layouts)
4. Uncheck **Lock print preview** if you wish to pan to a different location. Otherwise the pink shaded area on the map is what will appear in the printed Pdf file.
5. Click **Print**.

*Note: In general, choosing a larger map size will increase the time required to generate the print file.*

## 5.7 Export a Map Image

You can export an image of the current map. The file can include georeferenced information so that it can be used in desktop Geographic Information Systems (GIS) software. The image can be created in the following formats: **BMP, JPEG, PNG, TIFF, GeoTIFF** or **PDF**. Choose the **Export** tool from the **Maps & Data tab**.



To export a map image:

1. Select the image format;
2. Check the box to include georeference data (optional);
3. Click **Create Image**.

*Note: The GeoTIFF image format, by default, includes embedded georeferenced data.*

## 6 ADVANCED TOOLS

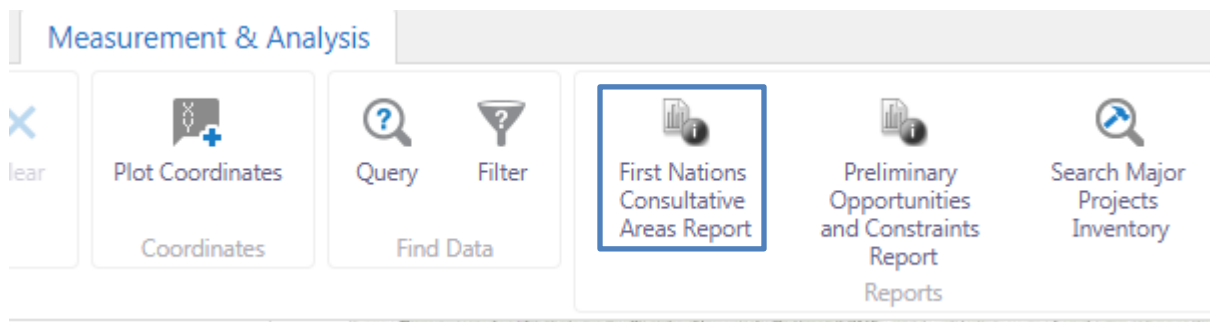
### 6.1 Create a First Nations Consultation Area Database (CAD) Report

The **BC Economic Atlas** can be used to create a custom report of First Nations consultation contacts information. A user-defined area or selected feature is used to query the [Ministry of Indigenous Relations and Reconciliation](#), First Nations Consultative Areas Database (CAD).

*The First Nations Consultative Areas Database provides preliminary contact information for First Nations who may have Aboriginal Interests identified within the area queried. These contacts are based on knowledge currently available to the Province. It is recommended users of the Consultative Areas Database seek support from the host agency you wish to make application to or contact the Ministry of Indigenous Relations and Reconciliation (MIRR) Manager in your area for more information prior to engaging First Nation contacts. The intent in providing this reporting service is to create awareness for the general public, proponents and First Nations of First Nations asserted and proven rights and title on the land base. We hope that the Consultative Areas Database tool will provide a small, first step in establishing healthy and respectful relationships with First Nations. The information provided is not intended to create, recognize, limit, or deny any aboriginal or treaty rights, including aboriginal title, that First Nations may have, or impose any obligations on the Province or alter the legal status of resources within the Province or the existing legal authority of British Columbia. The Province makes no warranties or representations regarding the accuracy, timeliness, completeness, or fitness for use of any or all data provided in the reports.*

#### Option 1: Run report from a user-defined area

1. Choose **First Nations Consultative Areas Report** tool from the **Measurement & Analysis** tab;
2. Draw an area of interest on the map using a point, line, polygon or rectangle;
3. Provide a **Report Name** (optional) and **Adjacency Buffer Distance** (optional);
4. Click **Submit**.



**Warning:** For both desktop and mobile devices, you may need to disable pop-up blockers in your browser to allow the CAD Report to be viewed.

## Option 2: Run report from selected feature(s)

1. Select map layer feature or features using the techniques shown in **5.2 Search by Selecting Features on the Map** (page 8-9);
2. Click the **Panel Actions Menu**;
3. Click **Consultative Areas Report**;
4. Provide a **Report Name** (optional) and **Adjacency Buffer Distance** (optional);
5. Click **Submit**.

The screenshot shows a web interface for generating a report. At the top, a panel titled 'Identify Results (33)' is visible, with a '2' in a box next to a menu icon. Below it, a 'Consultative Areas Report' option is highlighted with a '3' in a box. The report description reads: 'Create a First Nations Consultative Areas Report on selected feature(s). Note: You may need to allow pop-ups to run this report.' Below this, a '6.' is visible. The main part of the screenshot is a 'First Nations CAD Report' form with a close button 'x'. The form contains the following fields: 'Line width:' with a value of '5.0'; 'Adjacency buffer (m):' with a value of '0.0' and a '4' in a box next to it; 'Report Name:' with an empty text box; 'Format options: \*' with a dropdown menu showing 'CAD Report' selected; and a 'Submit' button with a '5' in a box next to it.

*Note: To run the First Nations Consultative Areas Report the user-defined area of interest or selected feature(s) must not exceed 100,000 hectares.*

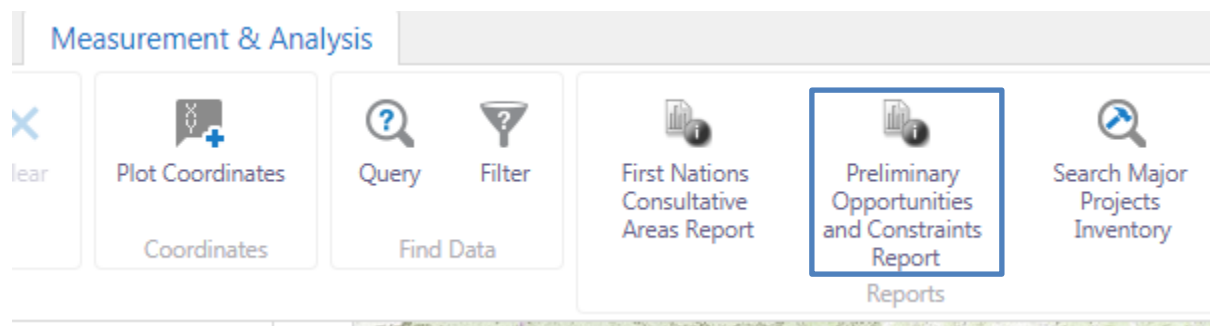


## 6.2 Creating a Preliminary Opportunities and Constraints Report

The **BC Economic Atlas** can be used to create a preliminary land analysis report of opportunities and constraints without the need to add any data to the map. This report will query over 60 public map layers to provide a preliminary list of legal or otherwise specified encumbrances (e.g., Parks, Private Land, etc.) and potential physical constraints (e.g., Transportation Infrastructure, Power Lines, etc.) that may need to be considered within the area queried. This report is not meant to provide an exhaustive for all encumbrances and constraints that may be present on the land base.

### Option 1: Run report from a user-defined area

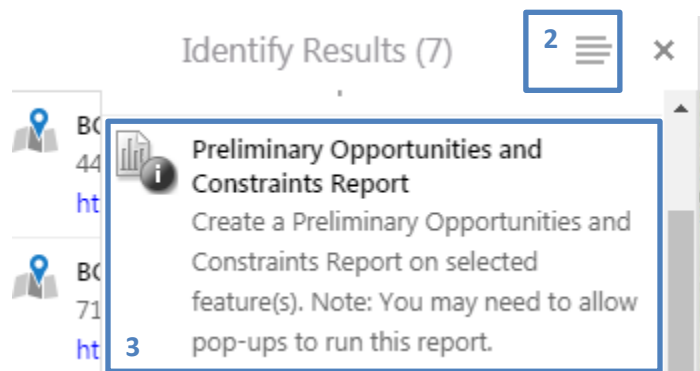
1. Choose the **Preliminary Opportunities and Constraints Report** tool from the **Measurement & Analysis** tab
2. You can review the list of layers as well as the associated metadata records by clicking: [Click here to see the layers](#)
3. Draw an area of interest on the map using a point, line, polygon or rectangle;
4. Provide a **Report Name** (optional) and **Adjacency Buffer Distance** (optional);
5. Click **Submit**.



**Warning:** For both desktop and mobile devices, you may need to disable pop-up blockers in your browser to allow the Preliminary Opportunities and Constraints Report to be viewed.

## Option 2: Run Preliminary Opportunities and Constraints Report from selected feature(s)

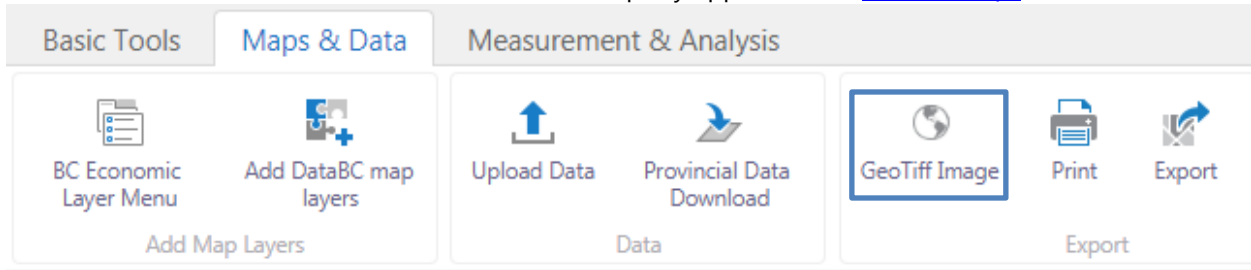
1. Select map layer feature or features using the techniques shown in **5.2 Search by Selecting Features on the Map** (page 8-9);
2. Click the **Panel Actions Menu**;
3. Click **Preliminary Opportunities and Constraints Report**;
4. Click **OK**;
5. Provide a **Report Name** (optional) and **Adjacency Buffer Distance** (optional);
6. Click **Submit**.



This screenshot shows the 'Preliminary Opportunities and Constraints Report' dialog box. It contains several input fields: 'Line width' with a value of 5.0, 'Buffer (m)' with a value of 0.0, and 'Report Name' which is empty. Below these is a 'Format options' section with a dropdown menu currently set to 'POC Report'. A blue box labeled '6' highlights the 'Submit' button at the bottom right of the dialog.

### 6.3 Creating a GeoTIFF Image URL for offline access

The **GeoTIFF Image** tool exports your map with georeferencing information embedded in a TIFF file that can be downloaded via a web-link URL. You can view this image in any third-party software application that supports the GeoTIFF standard. Once loaded you can access your location on the map using wifi or offline using the built-in GPS on your mobile device (requires iPhone and iPad Wi-Fi + Cellular or compatible Android device). To open, click the **GeoTIFF Image** tool on the **Maps & Data** tab. A GeoTIFF URL will be created that can be downloaded in third-party apps, such as: [Avenza Maps](#) .



## 7 CONTACT US

For questions or comments click the **Contact Us** button on the **Basic Tools** tab or to contact us directly please email: [bcea@gov.bc.ca](mailto:bcea@gov.bc.ca) . For information on other tutorial resources please visit the BC Economic Atlas homepage: [www.gov.bc.ca/economicatlas](http://www.gov.bc.ca/economicatlas) .

