iMapBC
Training Manual

Contents

Introduction to iMapBC

This manual looks at iMapBC tools and the advanced features included. This will help guide you through everything iMapBC can do.

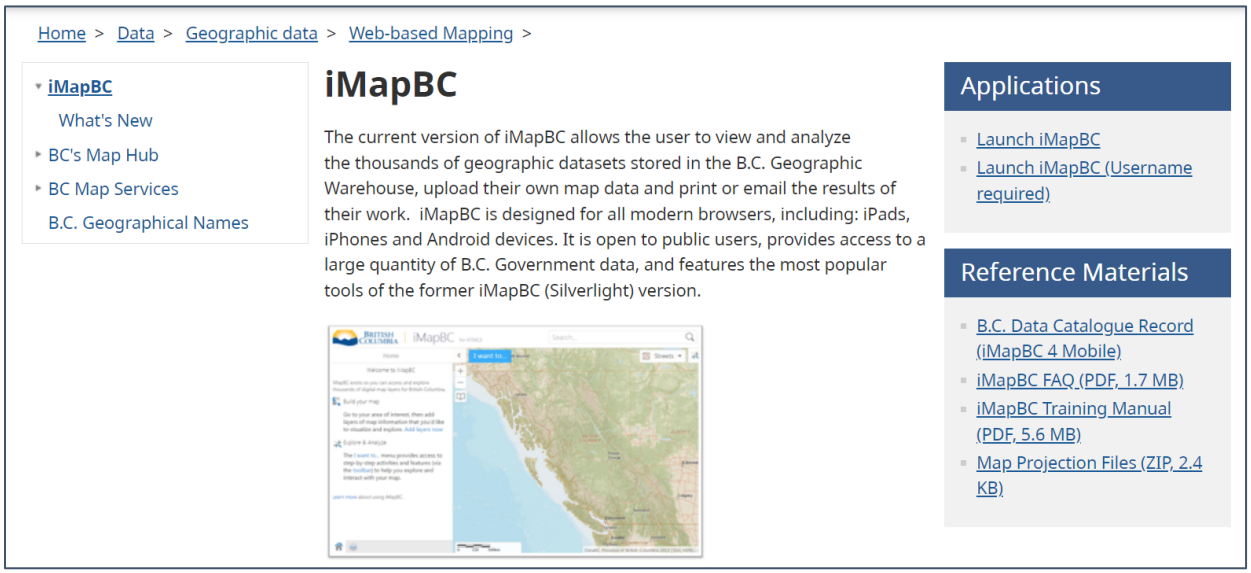
iMapBC is for viewing data all over British Columbia. You can make maps, save, reupload, and print them among many other things. iMapBC is a useful tool whether you have GIS training or not.

Starting iMapBC

To start iMapBC, open a web browser and go to the: DataBC Geographic Services home page. Click iMapBC.

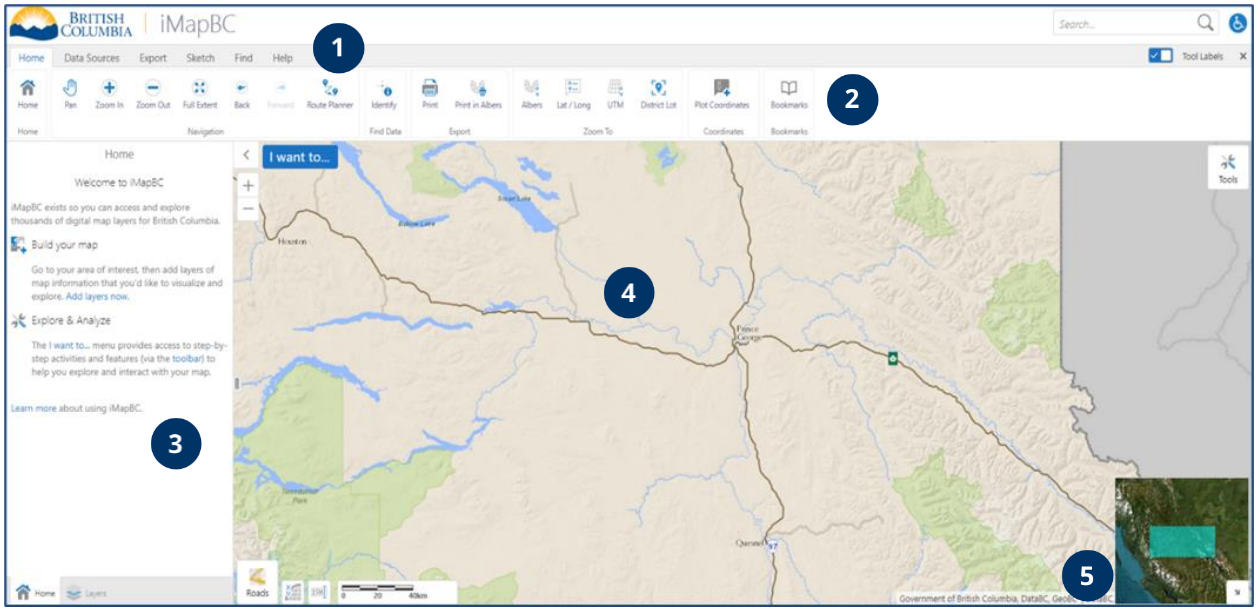
In the window, there are two options:

1. Launch iMapBC
2. Launch iMapBC (username required)



iMapBC Layout

The iMapBC interface has five main sections.



1. Toolbar Tabs: The toolbar has 5 tabs where all tools are. The sections are: Home tab (navigation tools), Data Sources tab (add information to the map), Export tab (Moving data off iMapBC), Sketch tab (draw on the map), and the Find tab (learn more about map layers).

2. Toolbar: In each tab, this contains more specific tools that are organized into groupings based on what they do.

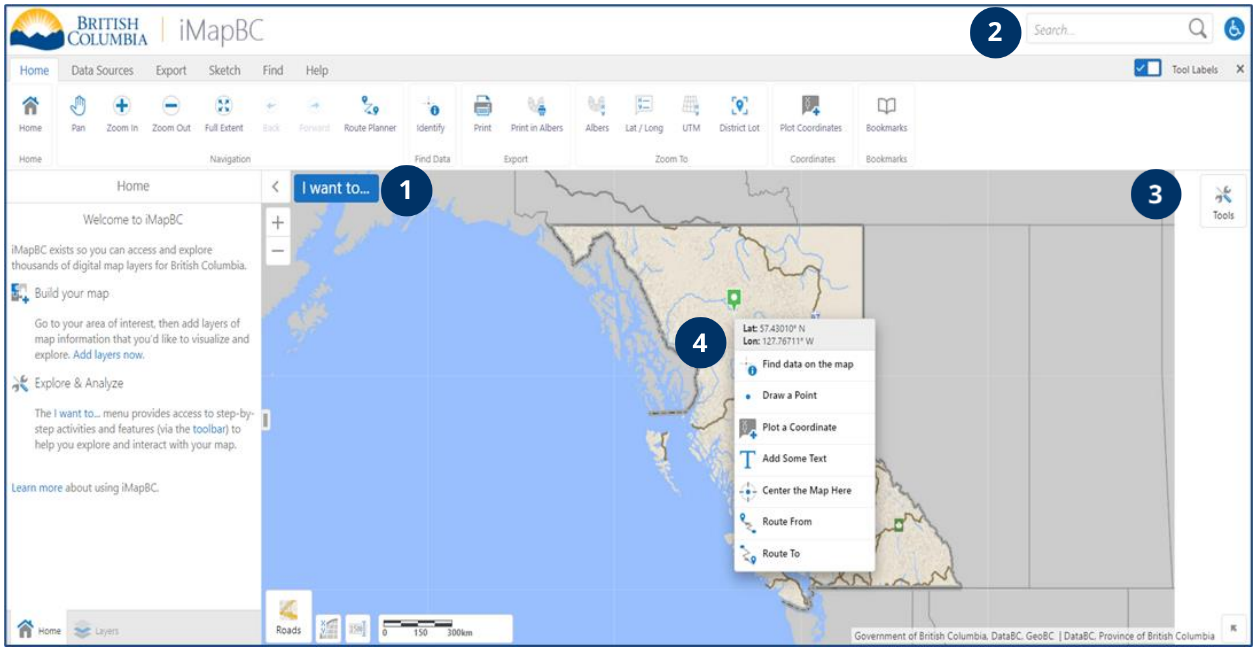
3. Information Panel: This shows different kinds of information as you use the map. For example, it shows 'Map Layers', where you can select which layers of the map to hide or show, or the 'Results List', which lists map features when you search or use the 'Identify' tool.

4. Map Window: This is where you can zoom in, pan, and right click on the map to get more information.

5. Overview Map: The overview displays a thumbnail of the map and its surroundings, with it starting as a small square. The Overview Map can be minimized by clicking the arrow at the bottom left of the map window. Also, dragging the current view box will bring you to that location in the map window.

Other Features in iMapBC

iMapBC shows these features:



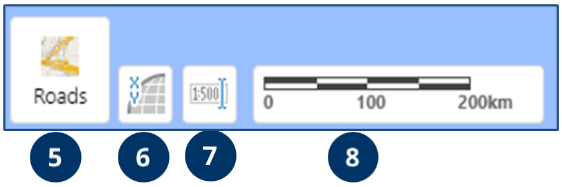
1. I want to...' Menu: A menu of shortcuts to popular tools. This includes the 'Save' and 'Open' project tools.

2. Search Box: Type the name of a feature or a street address into this box to search for it on the map.

3. Display / Hide Toolbar Icon: This icon shows or hides the toolbar when clicked.

4. Right Click Menu: This lets you get more info on the spot you clicked and let you use tools to mark that spot. More info is available below.

These icons will help you get different types of information. The data is most often shown in the 'Information Panel' on the left, like map layers, and search results.



5. Base Map Options: Click to show different base map options, like satellite imagery. This will change the map background image that is in the map window.

6. Coordinate Options: Let's you view and change the default coordinate system shown in iMapBC. The coordinates system in this section relates to the map centre location.

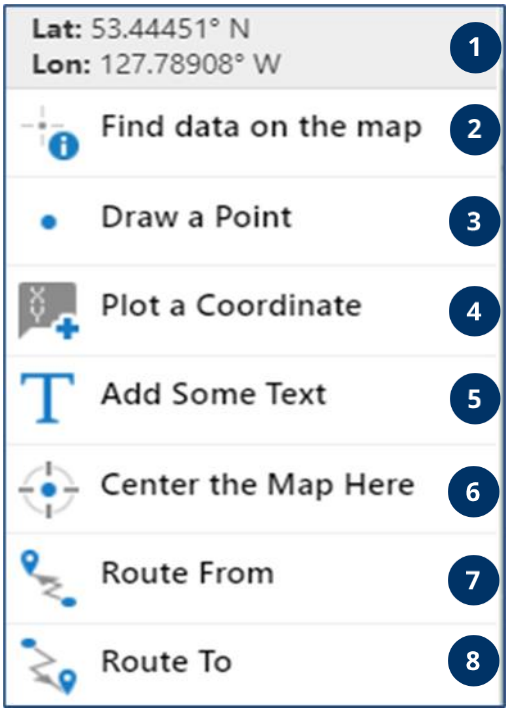
7. Scale Input Box: Allows the user to change the current map scale from a set of predefined map scale options.

8. The Scale bar shows how much space shown on the map relates to the space in the real world.

The 'Roads' option will not show visuals on a scale of 1:2257 and below.

Right-Click Options

Right click in the map window to display options and tools based on the location clicked in the window.

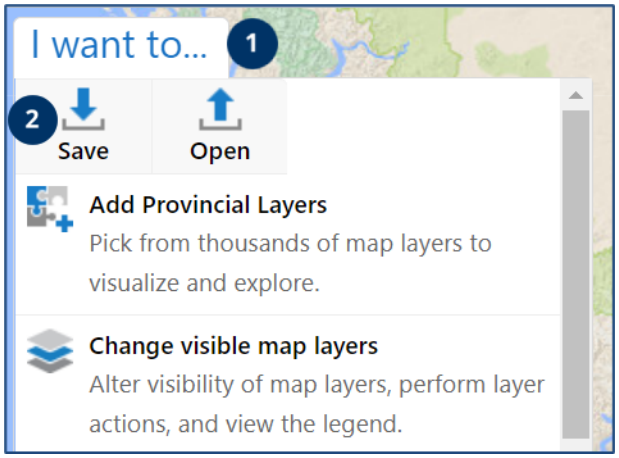


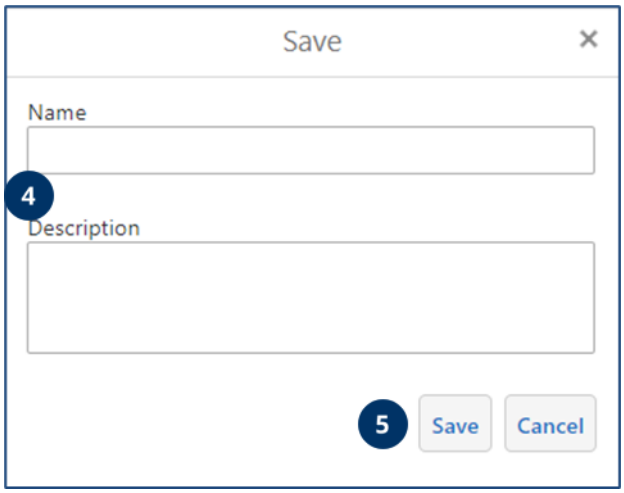
1. This shows the coordinates of the clicked location in the map window.
2. Find data on the map: Allows the user to use the 'Identify' tool on any added layers where you clicked.
3. Draw a Point: Draws a point in the map window.
4. Plot a Coordinate: Creates a coordinate callout in the map window.
5. Add Some Text: Allows the user to enter and place text in the map window.
6. Center the Map Here: Centers the map window to the clicked location.
7. Route From: Adds a starting address to the route planner.
8. Route To: Adds a stop to the route planner.

Save and Open Projects

iMapBC projects are saved to your computer and can be retrieved. Save and Open session options can be used on the 'I want to...' menu.

Save a Project

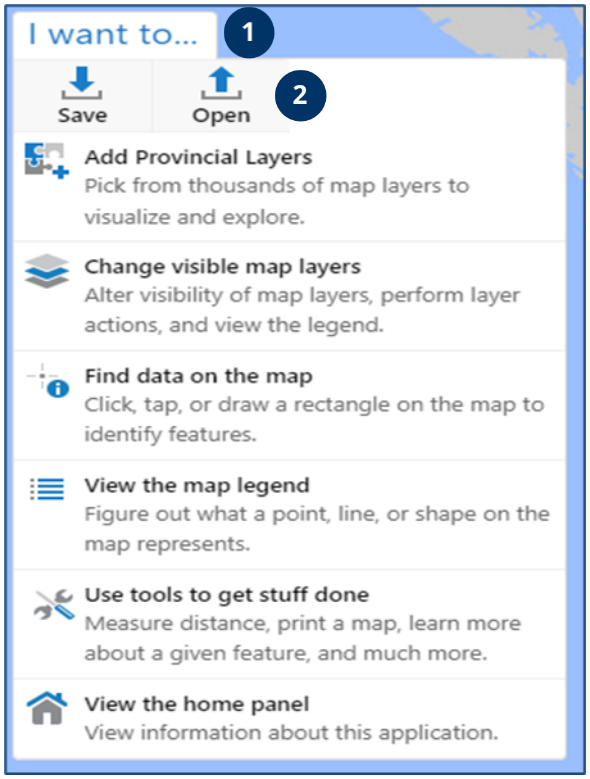




To save a project:

1. Click 'I want to...'.
2. Click 'Save'.
3. The Save Project' screen will open in the information panel.
4. Give the project a Name and Description.
5. Click 'Save'.

Open a Saved Project



1. Click 'I want to...'
2. Click 'Open'.
3. A new window will open in the information panel, warning that it will change your current map. Click 'Ok'.
4. A menu will open in the information panel asking for a .gvhp file, click 'Choose File'.
5. Your file explorer will open, upload your .gvhp file and it will show more info on your map. Click open and your map will load.

You can sort the projects shown in the Projects window by using any of the following options:

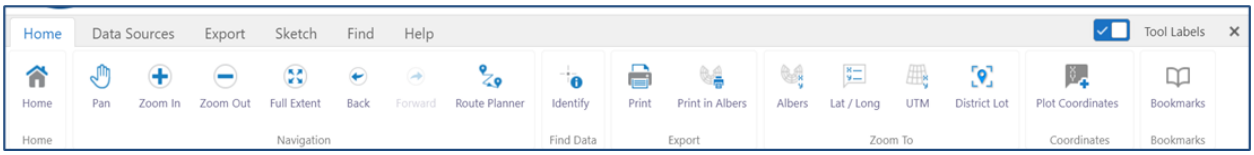
- 'Filter Projects...' allows you to filter by the project results. This will filter results by both project name and description.
- 'Show my projects only' will only display projects that you have created.

Home Tab

The ‘Home’ tab contains many of the popular tools in iMapBC.

Home Tool

The ‘Home’ tool opens the home screen information in the ‘Information Panel’. The home screen panel has quick links to popular tools in iMapBC. It also has a link to learn more about iMapBC through the Geographic Data & Services page.



Navigation Tools

The Navigation tools lets you move around the map window. This includes the following tools:

Click a location on the map and drag it to another location on the map with the ‘Pan’ tool.

The ‘Zoom In’ tool can be used two ways:

Point Click the map once to zoom in to half of the current scale.

- Hold the mouse button down and draw a box.

You can also zoom in at any time by:

- Rolling your mouse wheel forward
- Pressing the + (plus) key on the keyboard
- Using the zoom slider
- Double clicking anywhere in the map window

The ‘Zoom Out’ tool can be used two ways:

Point Click the map once to zoom out to twice the current scale.

- Hold the mouse button down and draw a box.
- You can also zoom out at any time by rolling your mouse wheel backward.

- Pressing the minus key on the keyboard Using the zoom slider.

The ‘Full Extent’ tool zooms to the full size of B.C.

The ‘Back’ tool zooms to the last map extent.

The ‘Forward’ tool zooms to the next map extent. This tool will appear grayed out until you have used the ‘Back’ tool.

Find Data

The only tool in the Find Data section of the home tab is ‘Identify’ . This lets the user learn more information about features clicked in the map window. This tool is described fully below in the Identify Tools section.

Export

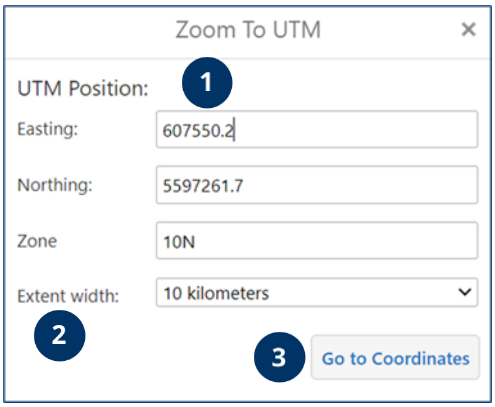
The only tool in the Export section of the home tab is the ‘Print’ tool. This lets the user print out the map you made. This is better described below in the Print tool section.

Zoom To Tools

The ‘Zoom To’ tool grouping has tools that can be used to move to specific locations. You can find areas based on exact coordinates or district lots.

Zoom to Coordinate Tools

Albers tool	Lat/Long tool	UTM tool	District Lot tool
			



The zoom to coordinate tools follow the same rules (UTM is used on the left). Click the desired coordinates tool.

1. In the Information panel, enter the coordinates you want to go to.

2. ‘Extent Width’ allows you to select the width of the map.

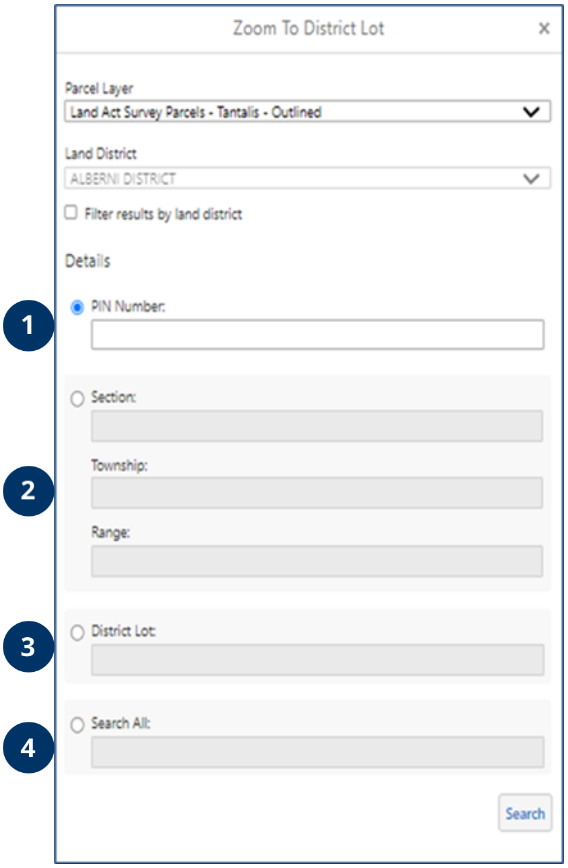
3. Click the ‘Go to Coordinates’ button.

Note that you also need to enter the UTM zone for the ‘UTM’ tool.

The distances zoomed to from the Extent width’ pull-down menu is approximate.

Zoom to District Lot Tool

The ‘District Lot’ tool opens the ‘Zoom to District Lot’ window in the information panel. It allows the user to zoom to a specified district lot using the legal parcel information input method.



Users can search for a District Lot using 4 different options: ‘PIN Number’, ‘Section Township Range’, ‘District Lot’, or ‘Search All’.

The results can be filtered by checking the ‘Filter results by land district’ option and then picking a Land District.

1. Enter a ‘PIN Number’ (i.e., 3916200)
2. Enter a ‘Section, Township, and Range’ (i.e., Section 3, Township 28).
3. Enter a ‘District Lot’ (i.e., 1605).
4. Enter any of the Legal Description to in the ‘Search All’ field (i.e., 1605, SDYD).

If the Land Districts – Tantalis and Land Act Survey Parcels - Tantalis layer was not added before by using the 'District Lot' tool, it will be added to your layers.

Coordinates

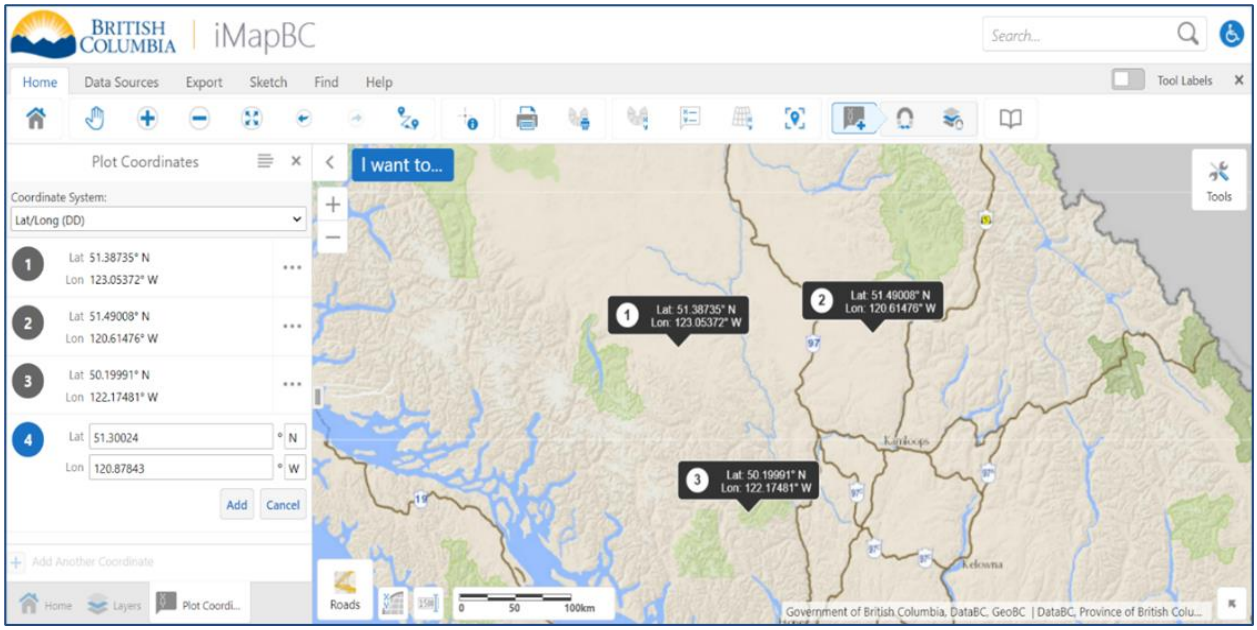
The 'Plot Coordinates' tool lets the user create coordinates that will be added to the map window. The user can do this using two methods:

- Generate coordinates in the Map Window (see the Generate Coordinates in the Map Window section).
- Manually Enter Coordinates (see the Manually Entering Coordinates section).

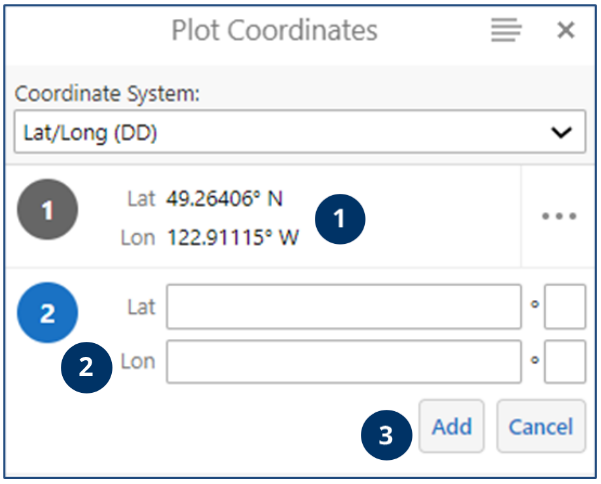
Generate Coordinates in the Map Window

Click the 'Plot Coordinates' tool and click any location on the map. A callout will be placed at that location using the defined coordinate system of the map.

> You can click the map repeatedly to place additional coordinate callouts.



Manually Entering Coordinates



The user also has the option to manually enter coordinates to create a callout in iMapBC.

1. In the Plot Coordinates window click in an empty coordinates text box.

2. Enter your known coordinates (including North and West).

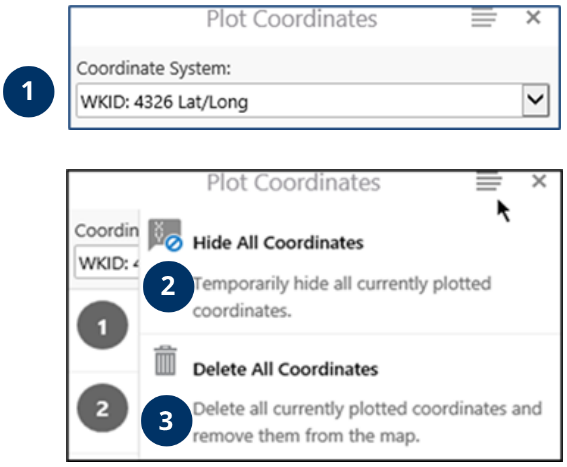
3. Click 'Add', and it will be added to the map.

To change the Coordinate System for the callouts, pick a Coordinate System from the drop- down menu and make any required changes.

Managing Coordinate Callouts

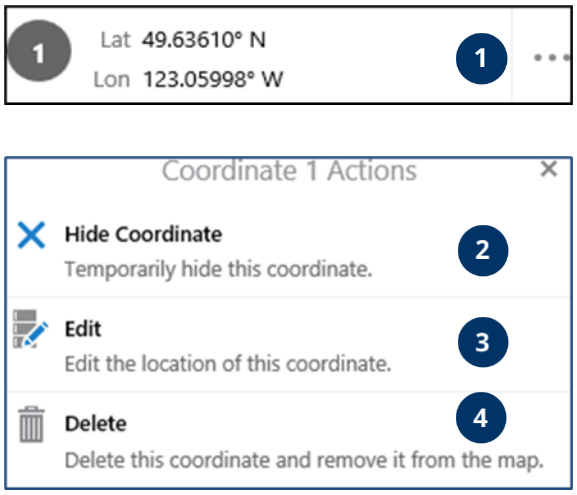
Coordinate callouts can be managed using several different tools outlined in the sections below.

Managing All Coordinate Callouts



1. The menu option (To the left of the 'x') lets you edit all your coordinate points.
2. 'Hide All Coordinates' will remove all the coordinate points from your map, but not delete them.
3. 'Delete All Coordinates' completely removes all old coordinate points.

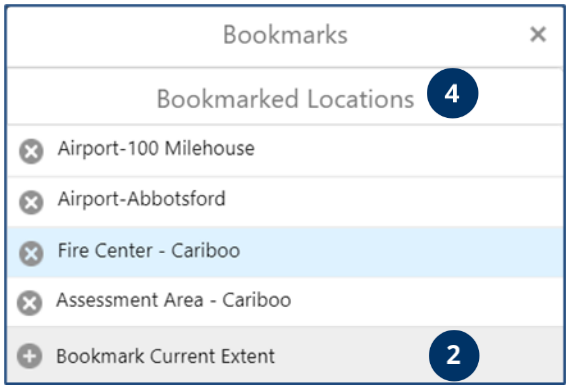
Managing Individual Coordinate Callouts

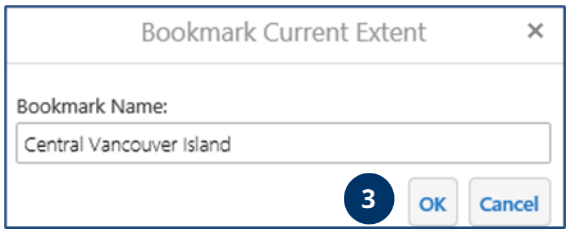


1. Click the '...' option to the right of a coordinate to manage that callout.
2. 'Hide Coordinate' will hide the point.
3. 'Edit' will let you change your point and move it.
4. 'Delete' to remove the point from the Plot Coordinates list.

Bookmarks

The ‘Bookmark’ tool lets you save a specific area that you plan to return to later in the same iMapBC project.





To create a new bookmark:

1. Click the ‘Bookmark’ tool.
2. The Bookmarked Locations window will open. Click ‘Bookmark Current Extent’,
3. Enter a name for the bookmark, and then click ‘Ok’.
4. The bookmark will appear in Bookmarked Locations list and enable you to return to this same area.

To open an existing bookmark:

1. Click the ‘Bookmark’ tool, which will open ‘Bookmarked Locations’.
4. Click the bookmark you want to open.

Data Sources Tab

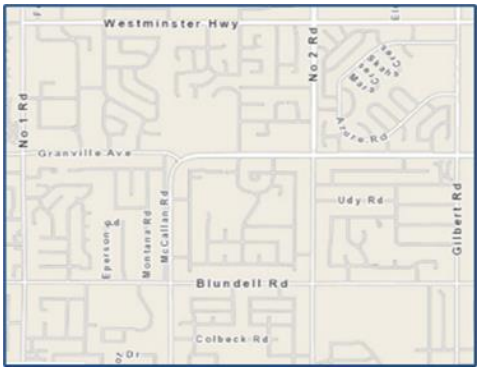
The tools under the ‘Data Sources ‘tab lets you add layers from the B.C. Geographic Data Warehouse (BCGW). It also lets you upload your own spatial and coordinate data. When using layers, it’s important to understand map concepts and tool options. This includes scale, layer scale dependencies, and layer order.

Map Scale

When you zoom in, the scale of the map increases - getting larger. A large-scale map covers a smaller land area than a small-scale map. A map that is zoomed in to a small town is large-scale, while a map of British Columbia is small scale.

Small Scale Map Example

Large Scale Map Example



Explanation: Scale is a ratio; 1:10 means that the map is one-tenth the size of the real-world area it represents. If you have a 1:100,000 map, the map is 1/100,000 the size of the actual place.

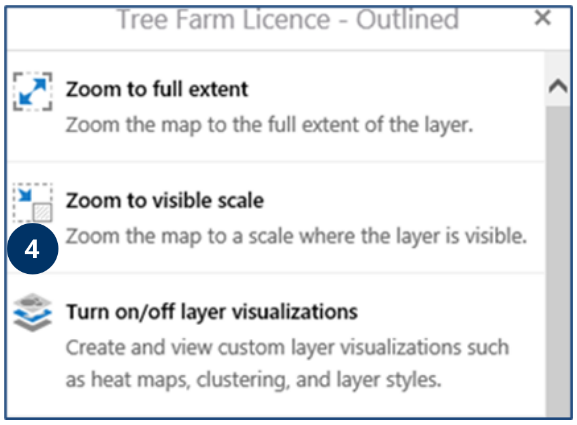
The map's scale is in the status bar below the map window. The scale adjusts as you zoom in and out on the map.

The Scale Bar can be adjusted by selecting one of the pre-populated scales in the list of options or manually typing in one of the scale presets.

Scale varies according to monitor, resolution, and size of the browser window. For example, full extent scale might be 1:12,000,000 on one monitor and 1:7,600,000 on another.

Layers Scale Dependencies

Scale dependencies are set up so that single layers' visibility changes at specific scales. The layer symbology can also have specific scale dependencies, or renders. A city might be shown as a tiny polygon that looks like a dot on a small-scale. On a larger scale, the entire city boundary may have an outline and fill colour.



1. When a layer is not shown at the current scale, its name will be grayed out.

2. When a layer is shown at the current scale, its name will be black.

3. To zoom to a scale where the layer is visible, click the arrow to the right of the layer name.

4. In the layer detail options select ‘Zoom to visible scale’.

Clicking the ‘Zoom to Visible Scale’ option will not change the map window location. You may need to check around the map to find the visible features.

My Layers

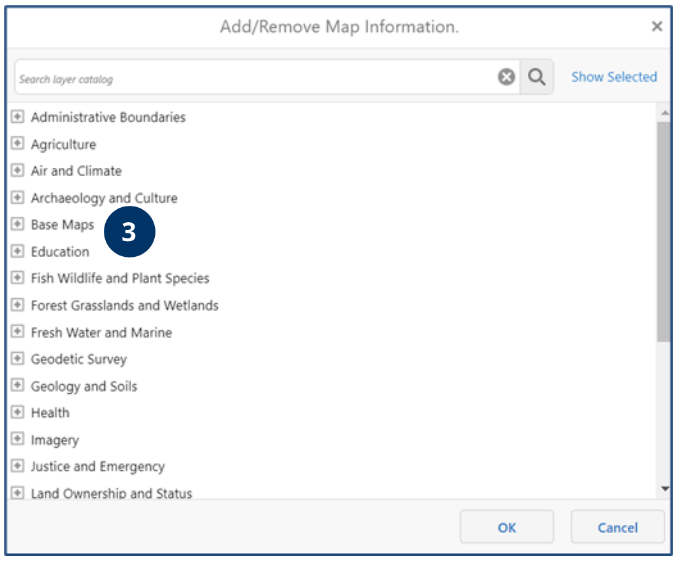
The ‘My Layers’ tool opens the layer list for iMapBC. All layers that have been added to the session are displayed.

Add Provincial Layers

The ‘Add Provincial Layers’ tool lets you use layers from the B.C. Geographic Data Warehouse (BCGW). The BCGW is a database with more than 2000 unique layers with every type of spatial info used by the B.C. government.

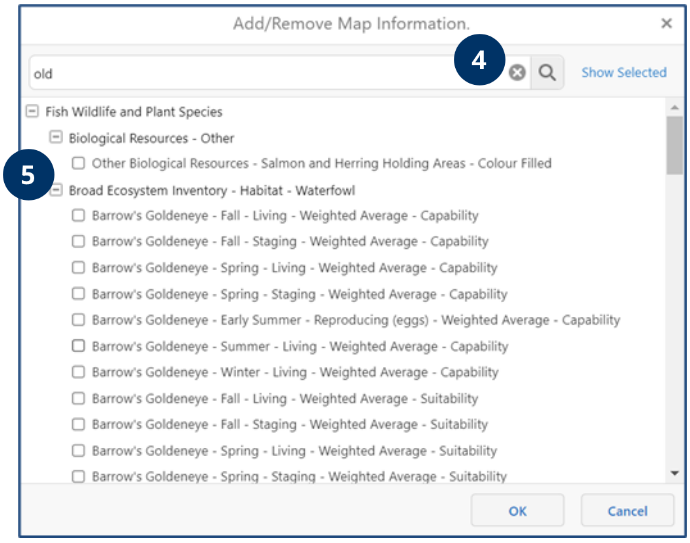
> Almost all layers are open for the public to use, but there are some are restricted. Special layers that are part of wildlife areas and archaeological sites are unavailable for public use. If these layers are not available to you, they will not be shown when adding layers, and you will need to ask for special permission.

The BCGW layers are provincial in scope, but there are groups of layers named with the ‘L_’ grouping. Some are specific to areas of the province sometimes called ‘Local’ or ‘Regional’ layers. In these cases, the layer will include the area it applies to in the file name. The example below will go more in depth on this.



To use the ‘Add Provincial layers’ tool:

1. Click ‘Data Sources’ on the toolbar.
2. Click ‘Add Provincial layers’. The ‘Data sources’ tab and the Add/Remove Map Information window will open.
3. Find the layer you are looking for by browsing through folders or entering text in the search box. Clicking a box will give you layers to add to your map.



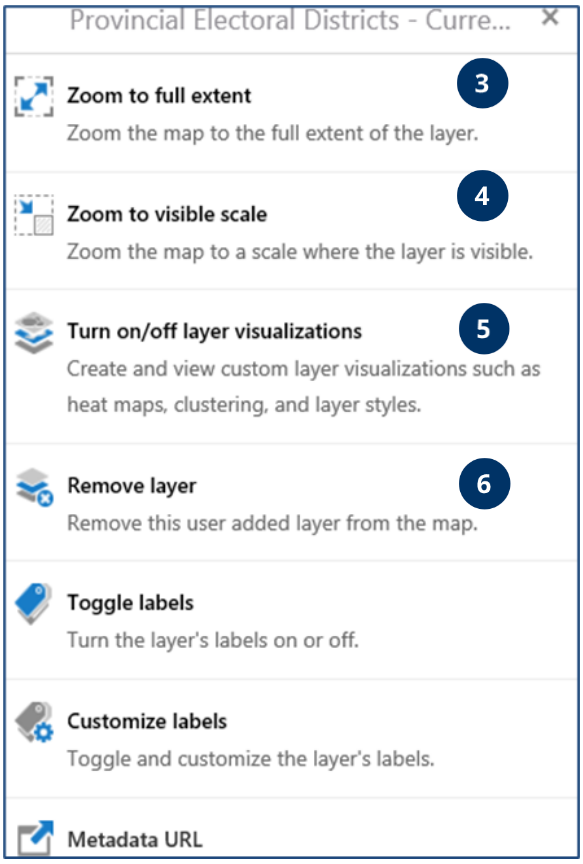
4. If you have typed into the search box and want to remove it, click the 'X' to the right of the search bar.

5. A check mark will be placed in the box when it is clicked. Click ok to add the layers to the iMapBC layer list.

Most layers will have a colour-filled type layer and an outlined layer. You can use one or both of layers on the map.

Working with Layers

Once layers have been added to the iMapBC 'Layers' list in the information panel, the way they are displayed in the map window can be changed in many ways listed below.



1. Clicking on the box to the left of the layer in the 'Layers' list removes it from the map. Clicking the box again will bring the layer back.

2. To use advanced layer options, you need to click the arrow to the right of any layer name. From there you can use the tools to change the layer you clicked on. All layer options are accessed by clicking this arrow.

3. You can zoom to the full extent of the dataset by clicking the arrow to the right of the layer name. That will open the layer options. Then click the 'Zoom to full extent' option.

4. You can zoom to where the layer will be shown by clicking 'Zoom to Visible Scale'. If it still doesn't show up, pan around the map to find the points.

5. How a layer looks in the map can be changed by clicking the 'Turn on/off layer visualizations' option. Layers can be made up of points, lines, or polygons. Changing each layer's visualization is done in similar ways. Changing a layer's characteristics is based on their geometry type.

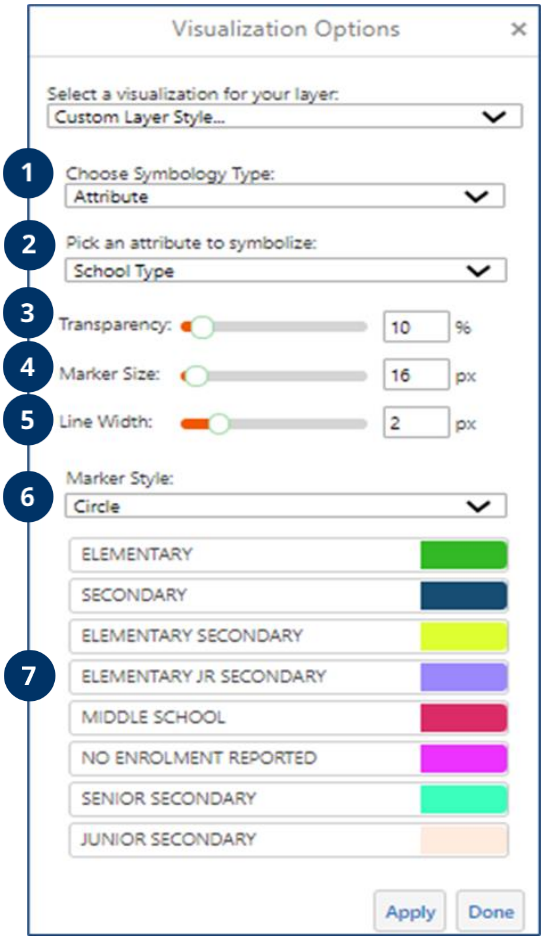
6. Clicking 'Remove Layer' will remove it from your current map.

When the ‘Select a visualization for your layer:’ option opens, there are two choices available:

1. None: This will return the layer to the default layer symbolizations.
2. Custom Layer Style…: This will allow you to make your own custom visualizations for a layer.

Visualization by Attribute – Unique Values

The 'Unique Values' option shows groups of features. The groups have matching traits, (school types, soil types, classifications, etc.). If there are more than 12 different values for a trait, only the first 12 will be used.



1. You can change layer visualizations, ‘Simple’ makes each feature in the layer appear the same way. ‘Attribute’ lets you change how a layer looks based on some traits you can pick. ‘Attribute’ creates values that will change points based on their differences.

2. ‘Pick an attribute to symbolize’ (where you create values from) will be different based on what layer you customize. You can only pick one attribute to symbolize at once.

3. ‘Transparency’ allows you to change how much you can see through a layer.

4. ‘Marker Size’ (point layers only) allows you to change the size of the point feature symbol.

5. ‘Line Width’ is the thickness of the outline surrounding the feature.

6. ‘Marker Style’ (point layers only) lets you change the shape of the marker symbol.

7. You can change the colours of your point types. The example here (School Type) will affect all points that apply in B.C. If you pick an attribute such as ‘Address’, it will only apply to 12 points within the map window (only ideal for large scale maps).

Once the layer has been customized:

- Click ‘Apply’ to make the layer changes in the map window but keep the Visualization Options screen open.

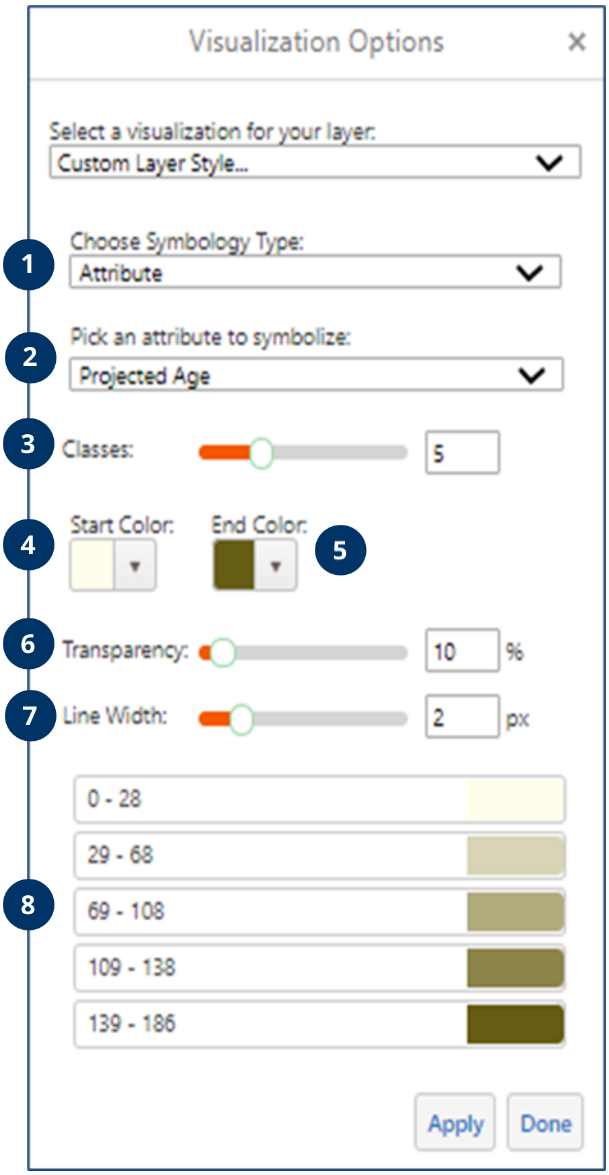
- Click ‘Done’ to keep the changes in the map window and close the Visualization Options screen.

The symbology for each feature can be done separately.

Symbolize by Attribute –Class Breaks

The 'Class Breaks Symbolization' type makes each feature look different. For it to work the layer needs to be customized. The ‘Visualization Options’ window will open in the information panel.

An example where 'Class Breaks Symbolization' could be used is to find the age of trees in a vegetation layer. When customizing your layer, you can organize the data by ‘Projected Age’. From there you can change what age ranges are shown to best fit your map.



These options are for changing how layers look on your map:

1. ‘Choose Symbology Type’ needs to be set to ‘Attribute’ to make changes.

2. ‘Pick an attribute to symbolize’ will need to be an option about numbers (For example ‘Projected Age’.

3. The ‘Classes’ section lets you pick how many different groups will be shown. You can change what belongs in each group in the bottom section (step 8).

4. The ‘Start Color’ sets the start colour of your first group. The colour will gradually change from each group to the 'End Colour'.

5. The ‘End Colour’ sets the colour of the last group.

6. The ‘Transparency’ option lets you pick how see-through you want the layer to be.

7. ‘Line Width’ is the thickness of the outline around the feature.

8. You can change the values for each group making them larger or smaller.

When the changes have been made:

- Click ‘Apply’ to make the changes in the map window but keep the Visualization Options screen open.

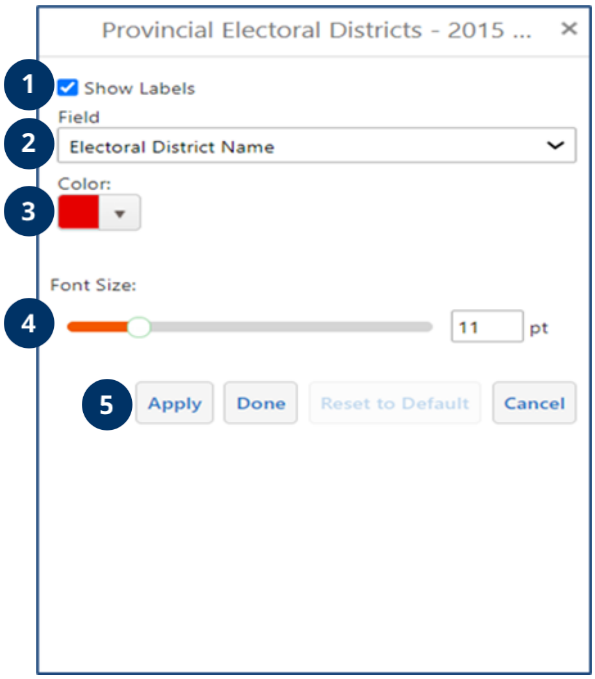
- Click ‘Done’ to make the changes appear in the map window and close the Visualization Options screen.

Toggle Labels

If your layer has labels, they can be toggled on or off by clicking the arrow to the right of the layer name. Open the layer options and select the ‘Toggle labels’ function. If no labels have been set up for the layer, this can be done using Customize Labels.

Customize Labels

You can make or change labels for a layer by clicking the arrow to the right of the layer name. Open the layer options and select the ‘Customize labels’ function.



The customize label screen will open. The user will be able to select:

1. ‘Show Labels’ will turn the label visibility on/off.

2. Pick the layer trait in ‘Field’, that will be used to generate the labels. Each layer will have different options to choose from.

3. Choose a colour for your label.

4. Set the Font Size.

5. Click ‘Apply’ and it will load onto your map.

Once the label has been customized:

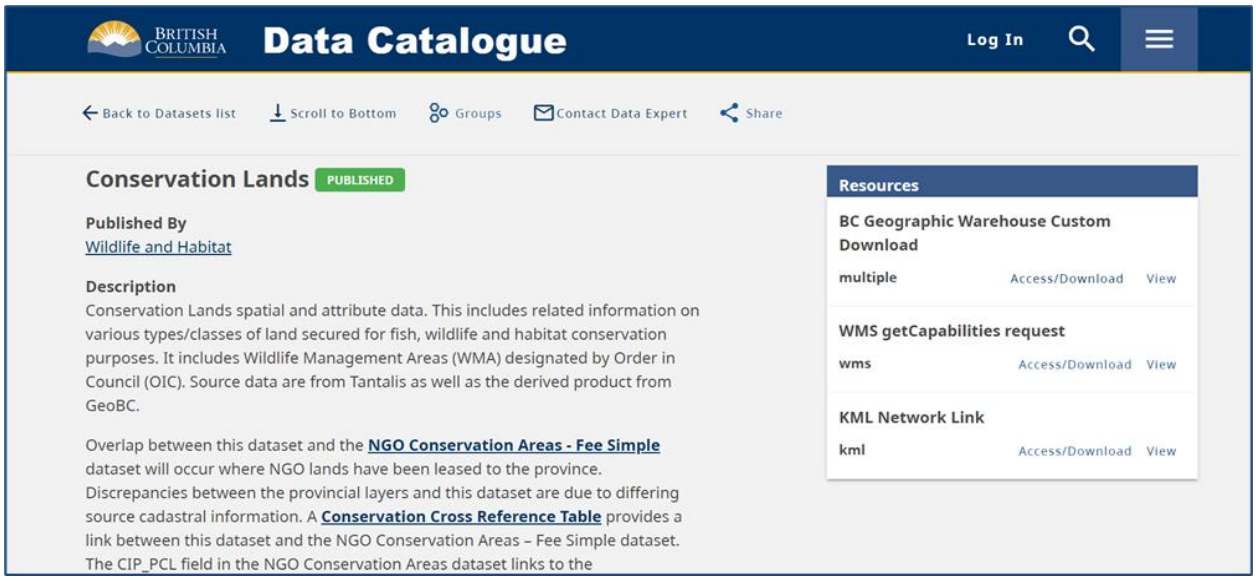
- Click ‘Apply’ to make the label changes in the map window but keep the customize label screen open.
- Click ‘Done’ to make the label changes in the map window and close the customize label screen.
- If there were labels for the layer, the user can click ‘Reset to Default’ to return to the layers default label.
- Click ‘Cancel ‘to ignore any changes and close the customize label screen.

Metadata URL

Metadata is called 'information about information' or 'data about data'. The BC Data Catalogue (or BCDC) is where you can get metadata and will explain everything about it too. The Freedom of Information and Protection of Privacy Act includes exactly how Government information is used. BC Data Catalogue metadata records work for all the layers added from the ‘Add Provincial Layers’ tool (BCGW layers).

To use metadata for a layer, click the arrow to the right of the layer name in the ‘Layers' list. Open the layer options and select ‘Metadata URL’.

A new window will open, and the layer's metadata record will be shown.



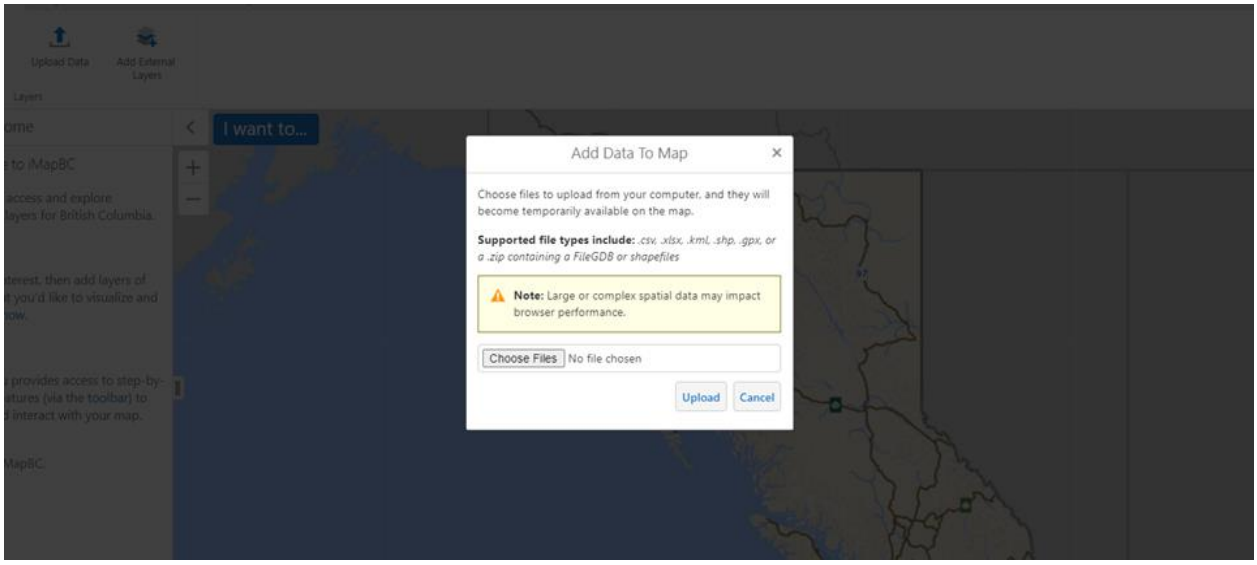
Upload Data Tool

The ‘Upload Data’ tool lets you upload spatial or coordinate information from your computer into iMapBC so it can be viewed. When you click the ‘Upload Data’ tool it will open a new window over the map window.

These data formats are good to use as input data layers when using the ‘Upload Data’ tool:

- .csv – comma separated values containing coordinates saved in a table.
- .xlsx – Microsoft Excel file with coordinates saved in a table.
- .kml – Google earth files.
- .shp – ESRI shapefiles.
- .gpx – GPS Exchange Format, is a common GPS data format for waypoints or coordinates.
- .zip – Compressed file that contains either a shapefile or File Geodatabase.

When picking a shapefile, all these components of a shapefile need to be included for it to work (cpg, .dbf, .prj, .shp, and .shx).



When uploading files, you need to make sure that you select all the relevant files. For data set make sure it is all the files required, and for shapefiles make sure it is all the associated files or it will not be added to iMapBC correctly.

Export Tab

The ‘Export’ tab is for users to get information in different ways from iMapBC. These different ways let people use the data on many websites and programs. You can get the data as an image, a printed map, or by downloading the data to your computer.

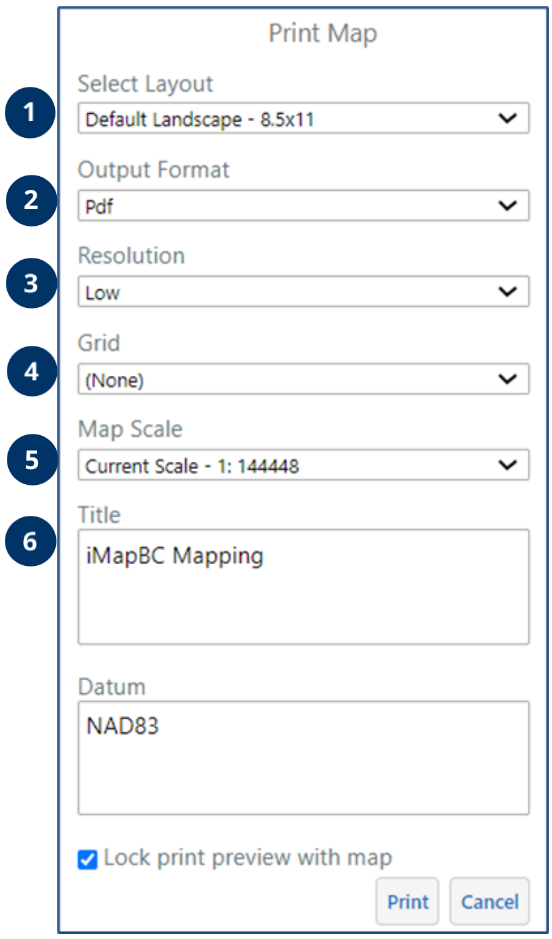
To use the ‘Upload Data’ tool:

1. Click the ‘Data Sources’ tab and click the ‘Upload Data’ tool.
2. In the ‘Add Data to Map ‘window, click ‘Choose Files’
3. Navigate to where your data is saved in your file explorer, then click ‘Open’.
4. Click ‘Upload’ to add the layer to the map window.

Print

The ‘Print’ tool lets you make a map that can be saved, and later sent to a printer, copied to a document, or emailed to other people. When you click ‘Print’ in the ‘Export’ tab it will bring up the ‘Print Map’ screen in the information panel on the side.

Many types of printing templates have been made to use in iMapBC. In these templates, map titles and data entry boxes for specific content are here to change the templates for use.



1. Select your print layout.
2. Set the map output format. This can be PDF, TIFF, BMP, GIF, or JPEG.
3. Set to either High or Low Resolution.
4. Add the Latitude / Longitude in the 'Grid' column.
5. Set the map scale of the output map. This can be a set scale, the current extent (what is seen in the current map), or the current map scale.
6. Give the map a title.
7. Click the 'Print' button.
8. In the Create Printable Map screen, click the 'Open File' button to view the map output.

The scale of map may not show all your layers when printed. Please look over your scale before and adjust it so all layers are there.

GeoTiff URL

'GeoTIFF URL' creates a URL link that lets you share the map as a GeoTIFF image with others. Using this tool lets you input data into Avenza Map.

> A GeoTIFF image shows georeferencing information in a TIFF file. You can see this image with other types of map data in other software that are public domain.

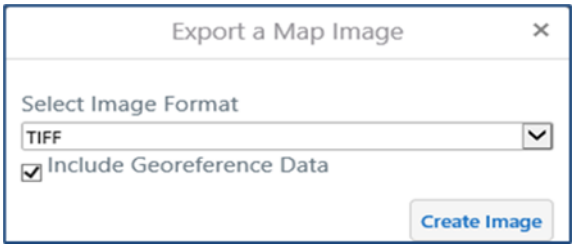
To use the 'GeoTIFF URL' tool:

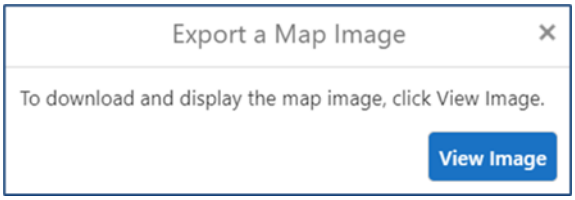
1. Click the 'GeoTIFF URL' tool on the 'Export" tab.

2. The GeoTIFF will be created. You can copy and paste the URL from the text box to share with other users.

Export Image

The 'Export Image' tool makes images of the Map Window in PNG, BMP, JPEG, TIFF, GeoTIFF, and PDF formats. You can export the images, including georeferenced data and can be used to import the images into a GIS platform.





To use the 'Export Image' tool:

1. Click the 'Export Image' tool on the 'Export' tab.

2. In the first 'Export a Map Image' box, pick the image format and check the box if you would like the file to include georeferencing information. Then click the 'Create Image' button.

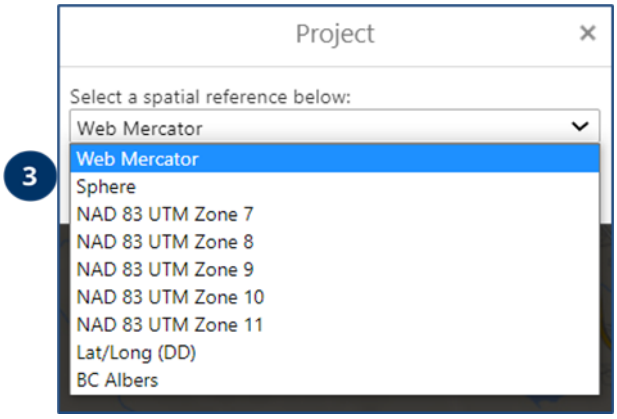
3. In the second 'Export a Map Image' box, click the 'View Image' button.

The image file will be put in a zip file which you can then open or save where you want.

Save Markup as Shapefile

'Save Markup as Shapefile' exports any Markups you made using the 'Draw' tools as a shapefile. Markups can be drawings created from the 'Sketch' tab, measurement drawings, or buffered identify drawings.

The shapefiles created will be exported in the Web Mercator projection. A shapefile is a common format for GIS staff to use in other applications.



To use the 'Save Markups as Shapefile':

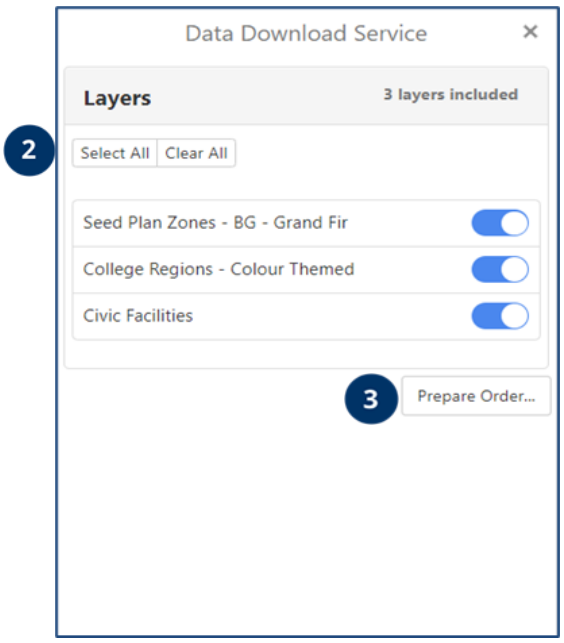
1. Create your markup.
2. Click the 'Save Markup as Shapefile' tool on the 'Sketch' tab.
3. Select a spatial reference in the pop-up window.
4. Depending on your internet browser, a download dialog box will open. Click 'Open' to view the download contents.
5. A zip file will open with your shape file. You can email the zip file to a GIS user or extract the shape file to a location on your network.

A shapefile will have files associated with it (.cpb,.dbf, .prj, .shp, .shx). All five of the files are needed to view the shapefile in a GIS viewer. Most viewers also need the .prj file to determine the projection of the feature.

Provincial Layer Download

'Provincial layer Download' lets you extract layers from iMapBC to use in other applications.

You can change the extent of the data, the data clipping method, and the output format. To use the 'Provincial Layer Download' tool: Add the layers to your iMapBC session using the 'Add Provincial Layers' tool from the 'Data Sources' tab.

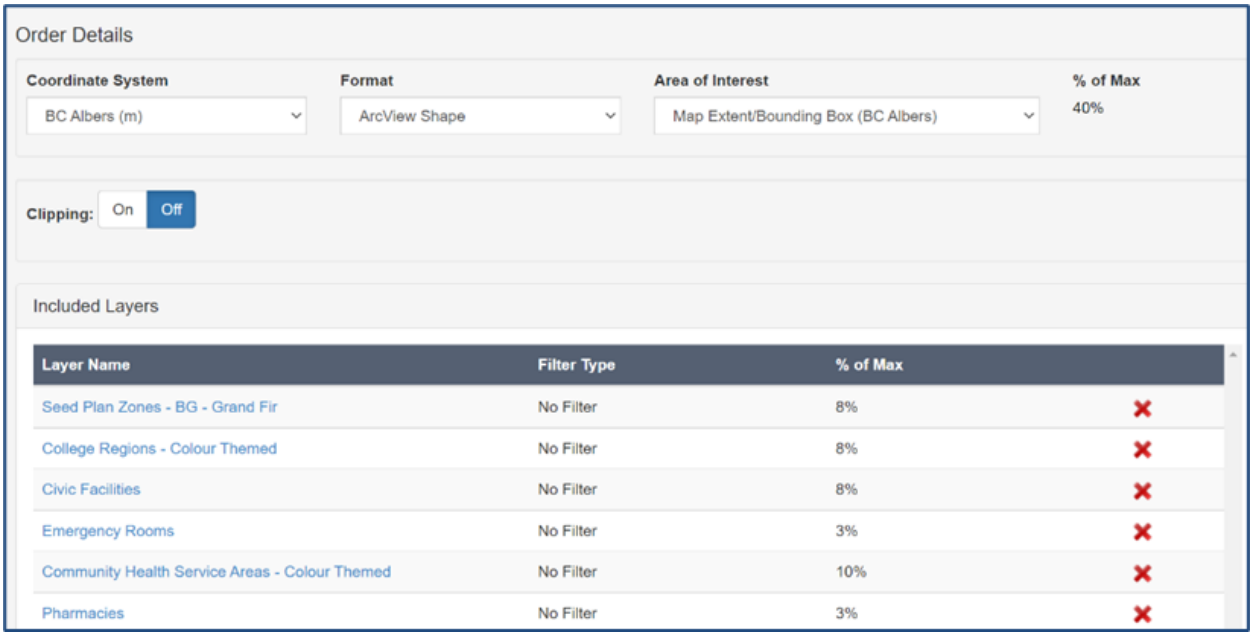


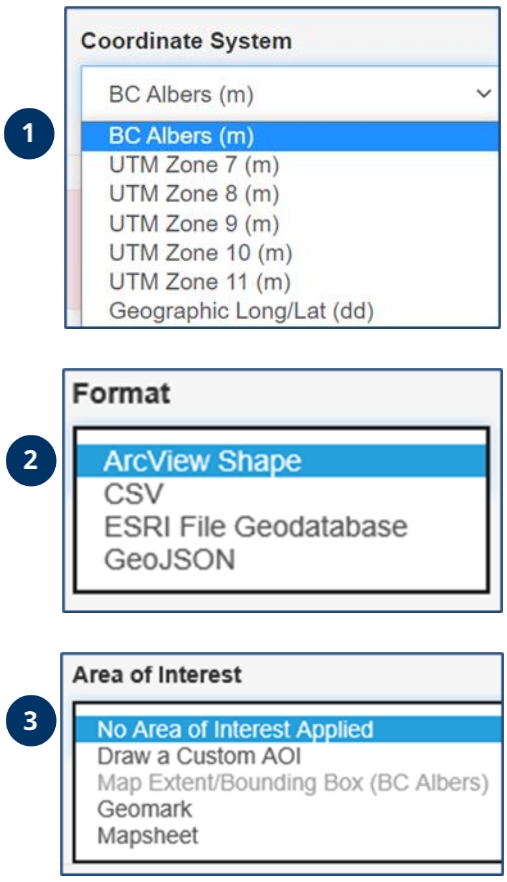
1. Click the 'Provincial Layer Download' tool on the 'Export 'tab.

2. In the 'Data Download Service' screen, Toggle the layers in the list that you want to download. You can also use the 'Select All' option to toggle all layers on or the 'Clear All' option to toggle all layers off.

3. When you have all your layers selected click 'Prepare Order'.

After clicking 'Prepare Order' a new window will open. From this window, these are some of the following options.





1. 'Coordinate System' lets you select the coordinate system that will be used for your map.

2. 'Format' will allow you to select your download output format.

3. 'Area of Interest' lets you make choices to define your data download selection extent. 'No Area of Interest Applied' will not apply any further area of interest to your download extent.

4. Enter your email address and agree to the Terms and Conditions, then click 'Submit Order'.

After clicking 'Submit Order' you will get two emails. One will be to tell you that you order was submitted, the second email will have your order details and a URL to the data package.

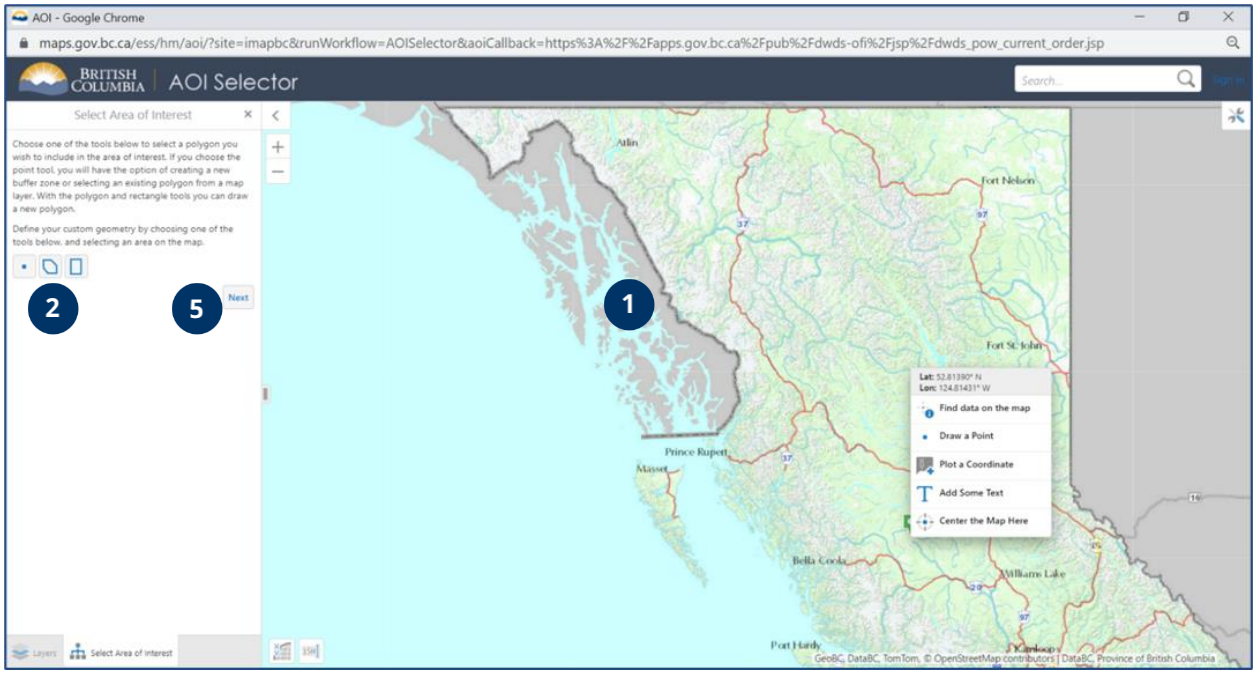
If the '% of Max' exceeds 100%, you will need to remove layers or set an area of interest to reduce the size to below 100%.

Create Custom AOI (Area of Interest) Options

This section explains the 'Draw a Custom AOI' option from the 'Area of Interest' selection in the Current Order window. You can do this by first clicking the 'Provincial Layer Download' tool then clicking prepare order, which will open the Current Order window. From there click on the 'Area of interest' column and select 'Draw a Custom AOI' Visuals. There are two Custom AOI options:

Draw a Custom AOI (Area of Interest)

Click the ‘Draw a custom AOI’ tool to open the AOI Selector map window.



To draw a custom AOI:

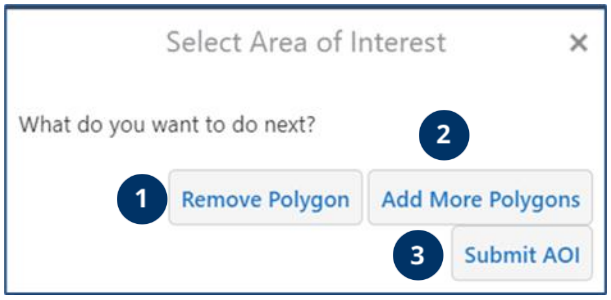
1. Zoom to the location in the map window where you want the AOI.

2. In the ‘Select Area of Interest’ screen, click the geometry option to be drawn.

3. In the map window, draw your AOI. If drawing a polygon, click to add each point and double click to complete the geometry.

4. Once the geometry has been drawn, the ‘Select Area of Interest screen will state: ‘Geometry captured’.

5. Click ‘Next’.



The 'Select Area of Interest' screen will show these options:

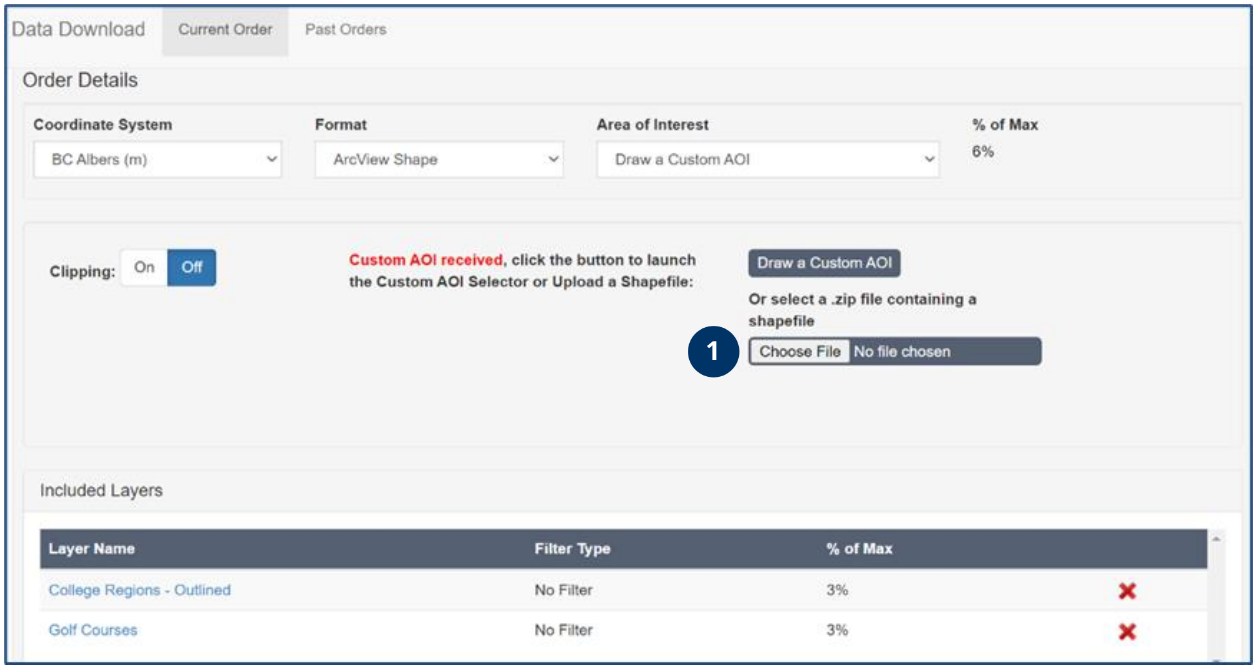
1. 'Remove Polygon': Removes the polygon as an AOI. If there is only one point in the map window the shape will be removed. If there is more than one AOI shape, you will be asked to select which AOI is to be removed.

2. 'Add More Polygons': Lets you make another shape to use as an AOI.

3. 'Submit AOI': Will close the AOI Selector window and set the shape as the AOI.

Select a .zip File That Contains a Shapefile

You can also use a shapefile that is stored in a .zip file to use as a Custom AOI.



To use a .zip file as the custom AOI:

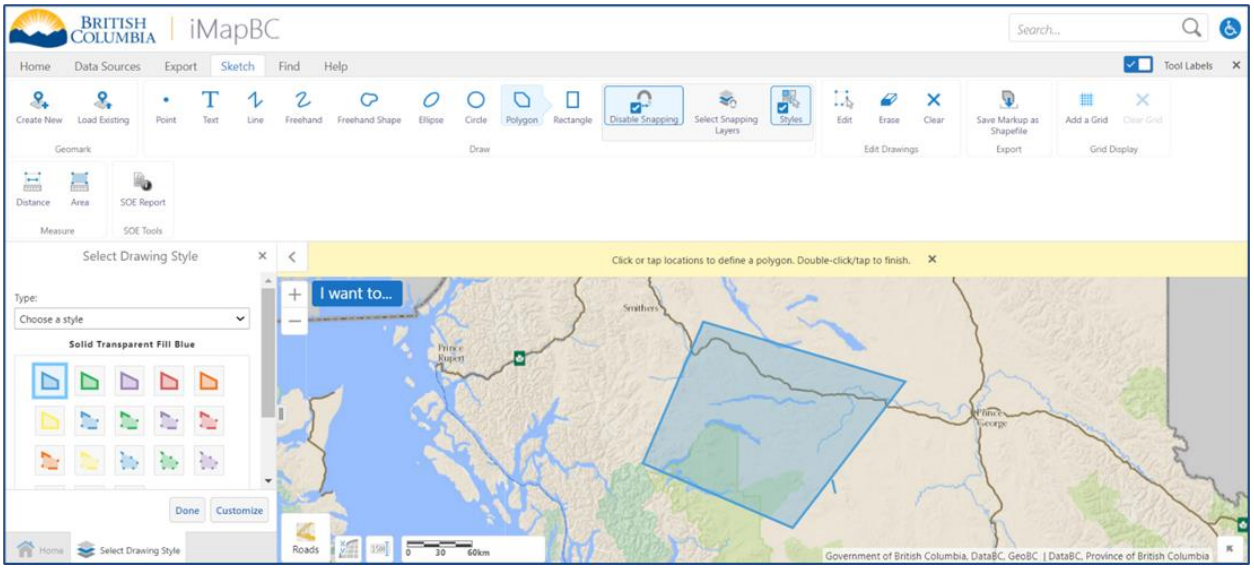
1. Set the Area of Interest to 'Draw a Custom AOI' and click 'Choose File'.
2. Go to the location where the zip file is created and click 'Open'.

Sketch Tab

The iMapBC ‘Sketch’ tab has tools to draw your own material on the map. These tools have many uses, like marking corrections to a data layer and submitting them to your data custodian.

Draw Tools

The nine Draw tools all follow the same pattern of use:



1. Click the ‘Polygon’ drawing tool under the ‘Sketch’ tab.

2. When you pick the ‘Polygon’ tool, you can turn on ‘Enable Snapping’ and ‘Style’ tools. The ‘Style’ tool can be used to set the symbology of the polygon you are drawing.

3. Click the first point on the map, and the first point of the polygon will be drawn there.

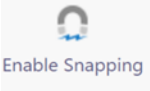
4. Continue clicking points until your shape is complete. Then double click to finish the polygon.

All 9 of the basic draw tools are described in this table:

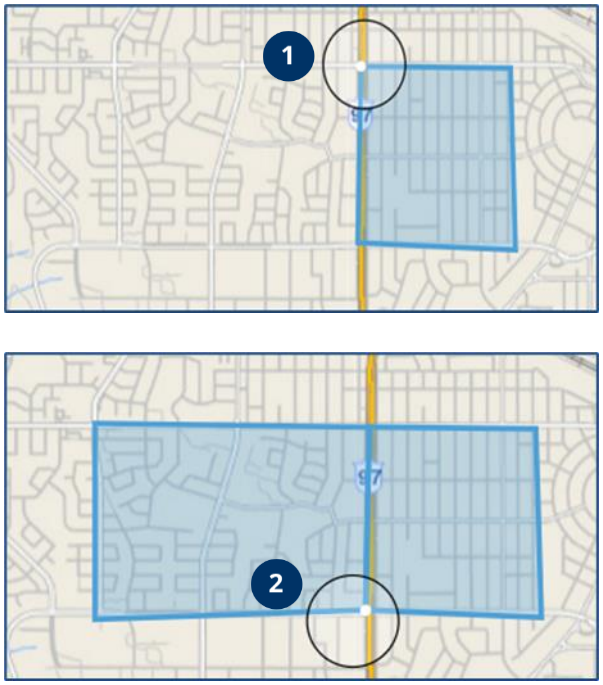
Tool	Action
 Point	Click ‘Point’, and then click anywhere on the map.
 Text	Click ‘Text’, and then click anywhere on the map. Type the text you want to add at this location on the map and click ‘Ok’.
 Line	Click ‘Line’, and then drag across the map to draw a line. To continue the line but change direction, click, and then drag in the new direction. To end the line, double-click.
 Freehand	Click ‘Freehand’, and then draw in any direction on the map to create a line drawing.
 Freehand Shape	Click ‘Freehand Shape’, and then drag across the map.
 Ellipse	Click ‘Ellipse’, and then drag across the map to draw an ellipse. The ellipse draws from the corner of the shape, so you can change the shape by moving the cursor up and down or sideways.
 Circle	Click ‘Circle’, and then drag away from that spot to draw the shape. The circle draws from the center out, so the further you drag your cursor, the bigger the circle will get.
 Polygon	Click ‘Polygon’, and then drag across the map to start a polygon. To change direction, click and then drag in a new direction. The shading shows that the polygon is filling in the space of the area made by your drawing. Double-click to end the polygon.
 Rectangle	Click ‘Rectangle’, and then click one corner of the rectangle you want to draw. Drag away from that corner and a shaded rectangle will form under your cursor.

Enable Snapping

When drawing markups, you can snap your points to existing markups on the map. Snapping is useful as it makes it easier to draw to the exact point on the map. Snapping is only a feature available for the 'Polygon' and 'Line' sketch tool.



Click the 'Enable Snapping' option and either the 'Line' or 'Polygon tool. You can disable snapping at any time by pressing the same button which will be labeled as 'Disable Snapping'.



1. After drawing your first shape and enabling snapping, your mouse will attach to the edges of your last shape. You can now draw your new shape with no overlap or missed area.

2. After drawing your new shape and double-clicking to finish it you will see that snapping is still enabled. You can snap together any number of shapes to modify your map.

Only drawn features can be used for snapping. BCGW layers are not enabled for snapping.

Select Snapping Layers

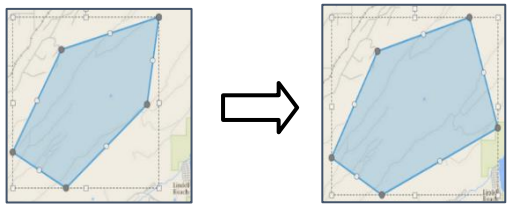
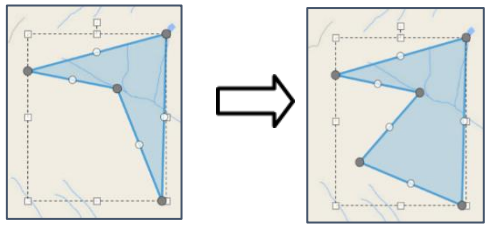
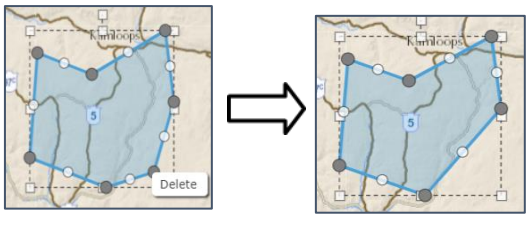
Layers are currently not enabled for snapping in iMapBC. The function will be added in a later update.

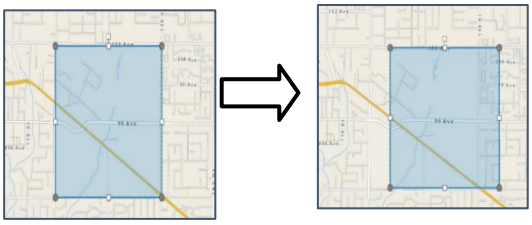
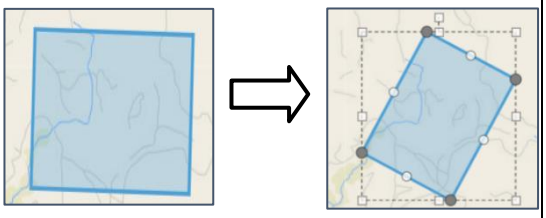
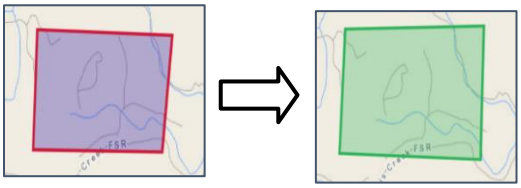
Edit Tool

The 'Edit' tool is used to move, edit, or restyle the geometry of a drawing in the map window.

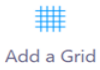
To edit a drawing:

1. Click the 'Edit' tool.
2. Click the drawing to be edited. Each vertex in the shape will be shown as a dark grey circle.
3. Make any of the edits listed below.
4. When you are finished editing, double-click outside of the shape to complete edits to your sketch.

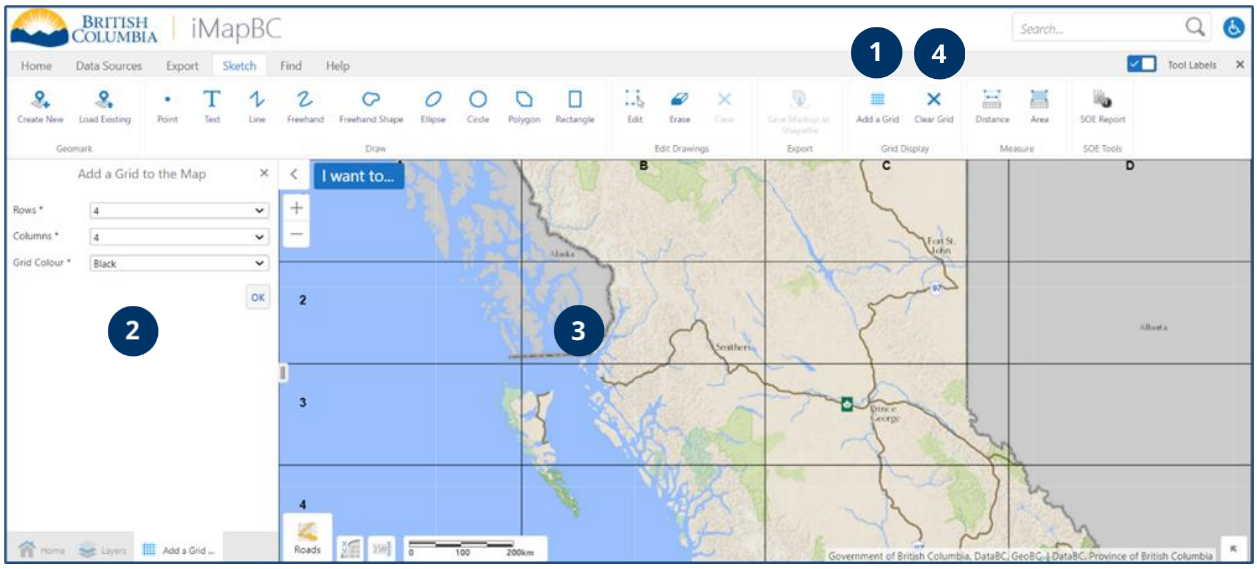
Edit	Process	Image
Move Vertex	Left click and drag a point (grey circle) to its preferred location. Release the button to set the location of a vertex.	
Add Vertex	Click on one of the white circles between the vertices (larger grey circles).	
Delete Vertex	Right click on a vertex (grey circle). The 'Delete' option will appear. Click 'Delete' to remove the vertex.	

Resize Drawing	Left click and drag one of the white squares around the drawing to resize the drawing.	
Move Drawing	Left click and drag in the center of the drawing to move the shape to a new location.	
Rotate Drawing	Left click and drag the white square at the top centre of the drawing to rotate it.	
Restyle Drawing	On the Sketch toolbar, click the 'Styles' tool and select your style preference.	

Grid Display Tools



The ‘Add a Grid’ tool adds a grid to your current map extent. The grid added does not follow any lines of latitude or longitude.



To add a grid:

1. Select the ‘Add a Grid’ from the Sketch tab.
2. In the ‘Enter Number of Columns and Rows’ screen, select the preferred options and click ‘OK’.
3. The map will be divided into the defined grid pattern.
4. To remove a ‘grid’, click ‘Clear Grid’ from the ‘sketch’ tab.

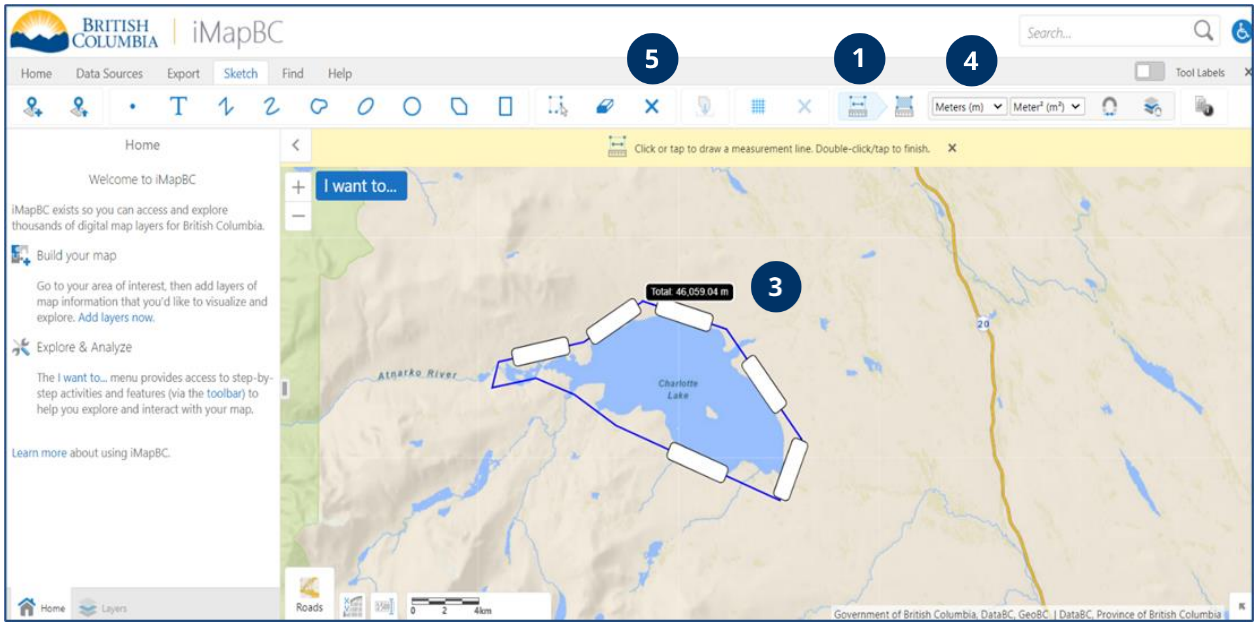
Measure Tools

The measure ‘Distance’ and measure ‘Area’ tools are simple tools for drawing features and measuring distance and area.

Disclaimer: Do not use this tool for formal business decisions. It is not a fully accurate tool. The measurements are not legal due to the varying topography of Earth. We recommend not relying on this measurement.

Measure Distance

The ‘Distance’ tool in the ‘Sketch’ tab is convenient for measuring linear paths and area on a map.



1. Click the measure ‘Distance’ tool.

2. After you click the start point for the line feature to measure, move your mouse away, and click. A black label will appear showing how far the mouse location is away from the last point.

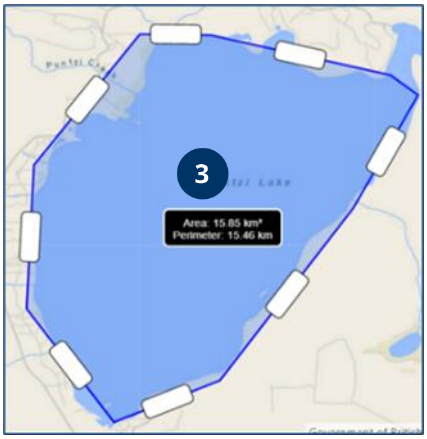
3. Continue clicking points until your line feature is complete, double clicking your last point to finish. Each section will be labeled with its length in the white box, and its total distance will be shown in black at the end.

4. You can change how distance is shown during or after creating the distance measurement. Set the units for the 'Distance' and 'Area'.

5. To remove the measured line shown on the map, click the ‘Clear’ tool (in the Edit Drawings section when you are finished).

Measure Area

The measure ‘Area’ tool is for measuring straight paths on the map. To use the measure ‘Area’ tool:



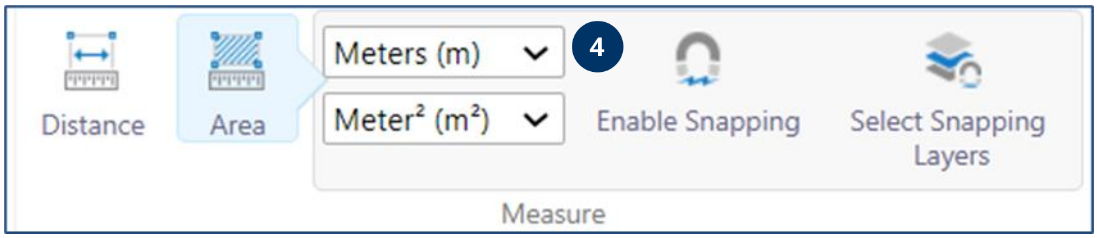
1. Click the measure ‘Area’ tool.

2. After you click the start point for the polygon feature to measure, move your mouse away, and click. A black label will appear showing how far the mouse location is away from the first point.

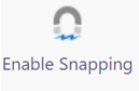
3. Keep clicking points until your polygon feature is completed. It will show the total perimeter, and the length of each section in the white boxes. The area will be shown in black in the centre of the measured area.

4. You can change the units of display during or after creating the distance measurement. Set the units for the ‘Distance’ and ‘Area’.

5. To remove the measured line shown on the map, click the ‘Clear’ tool (in the Edit Drawings section) when you are finished.

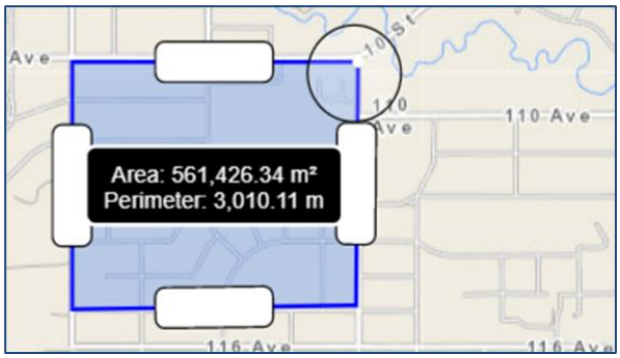


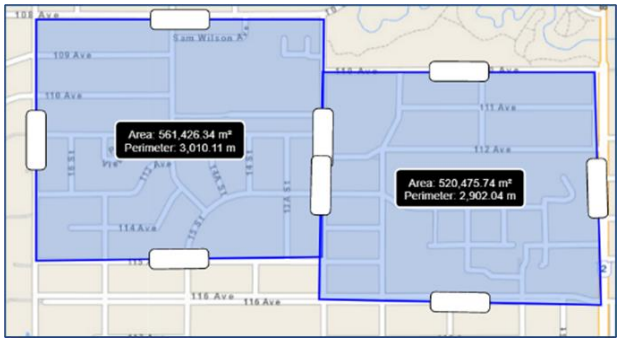
Snapping Tools



When drawing markups, you can snap your points, to markups or measurements on the map. Snapping is useful because it makes it easier to draw to the exact point on the markup. You can disable snapping at any time by clicking the same button again now labeled as 'Disable Snapping'.

To use, click the 'Enable Snapping' option and then select either of the 'Measure' tools. A circle around the mouse cursor appears and the vertex (white square) will snap to the existing markup edge.





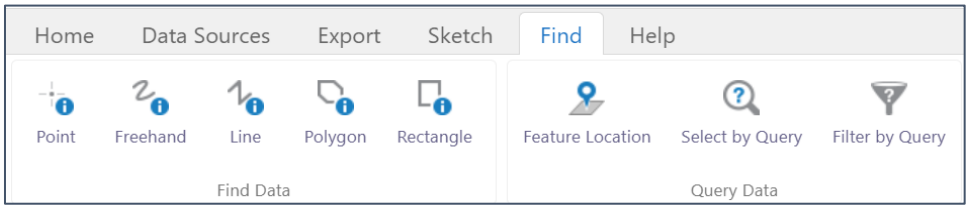
Only drawn features can be used for snapping. BCGW layers are not enabled for snapping in the BCGW.

Select Snapping

Layers are currently not enabled for snapping in iMapBC. The functionality will be added in a later update.

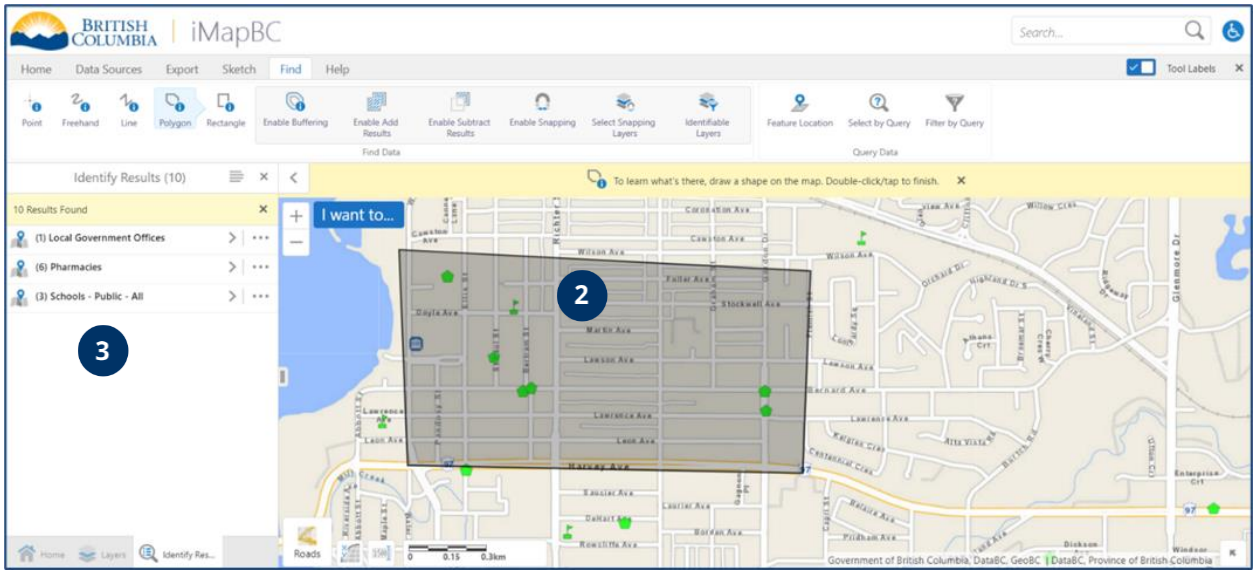
Find

The ‘Find’ tab contains a variety of tools designed to search and analyze information.



Identify tools

The ‘Point, Freehand, Line, Polygon, and Rectangle Identify’ tools are to get more info from an area. You can learn which layers apply in that area and more. All the ‘Identify’ tools follow the same basics. The 'Polygon’ Identify tool is used in the example below. Each of the 'Identify' tools is described in the table at the end of this section.



1. On the ‘Find’ tab, click the ‘Polygon’ identify tool.

2. Click on the map to start drawing the feature. When the last point of the polygon is ready to be placed, double click on the map to finish the shape.

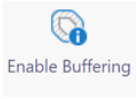
3. The polygon will then disappear from the map, and the results will be shown in the 'Identify Results' window.

The 'Identify Tool' Actions:

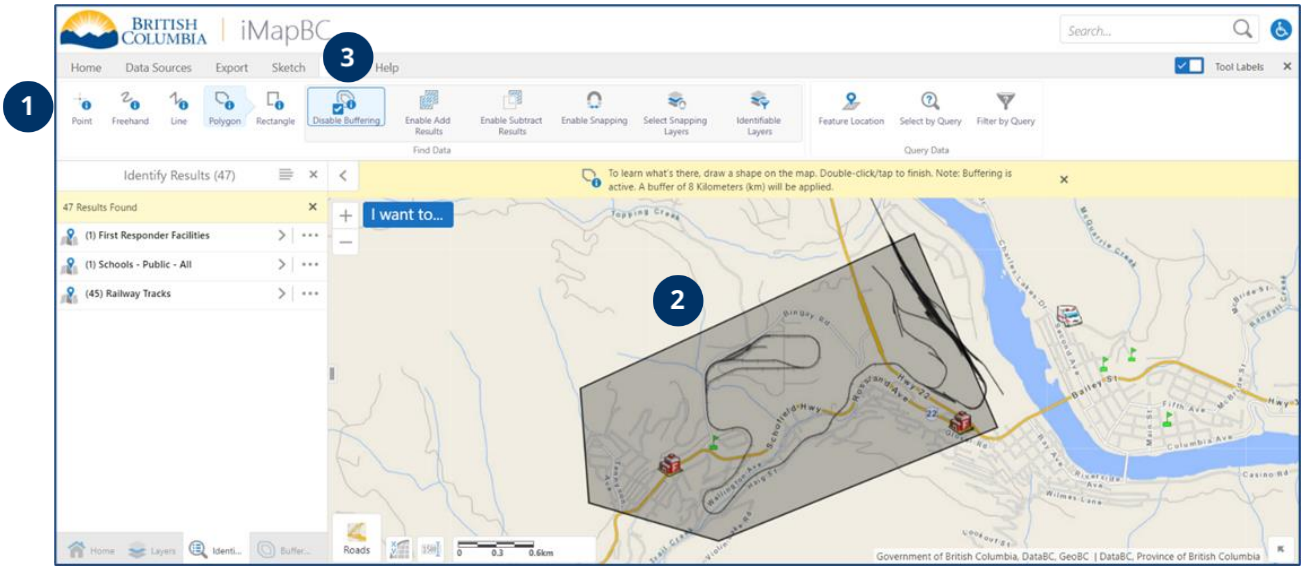
Tool	Actions
 Point	Click 'Point' identify and then click any point on the map. Any features found at that point on the map are included in the process.
 Freehand	Click 'Freehand' identify and then draw in any direction on the map over the features that you want to include. When you finish drawing, the identify process begins. All the features that align with the line are what will be shown.
 Line	Click 'Line' identify and then drag across the map to draw a line. To continue the line but change direction, click the map and then drag in the new direction. To end the line, double-click. All the features that align with the line are included in the identify process.
 Polygon	Click 'Polygon' identify and then drag across the map to start a polygon. To change direction, click and drag in a new direction. A black shading appears under your mouse to indicate that the polygon is filling in the space of the area. Keep clicking until the shading has covered the area you want to include in the process. Double click to end the polygon. You do not have to complete the shape. If the shading covers the area, you can double-click, and the line will be completed. All the features beneath the shaded area are included in the identify process.
 Rectangle	Click 'Rectangle' identify and then click on one corner of the area you want to define. Drag a square away from the corner you clicked. A black shaded square appears under the cursor. When your area is in the square, lift your finger from the mouse. All the features covered by the rectangle are included in the process.

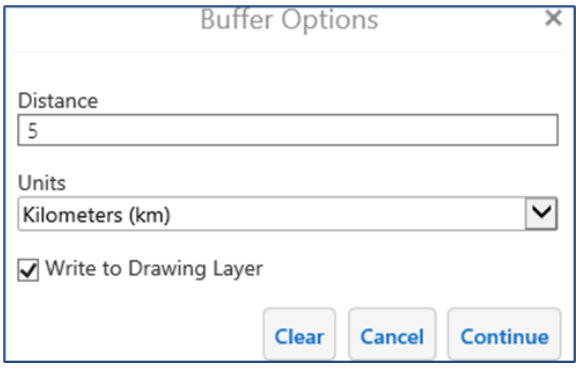
Scale dependencies still apply. If the layer name is grey, it is not visible and not included in the results.

Enable Buffering



The ‘Enable Buffering’ option in the ‘Find’ tab lets you get data from around the shape you draw too. You can easily change how large the buffer distance is and consider that in your map.





1. Select a tool to draw a shape on the map and draw your shape.

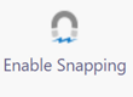
2. When you are finished your shape double click the last line and the shape will disappear. Your results will appear in the information panel.

3. Click ‘Enable Buffering’ in the tool bar.

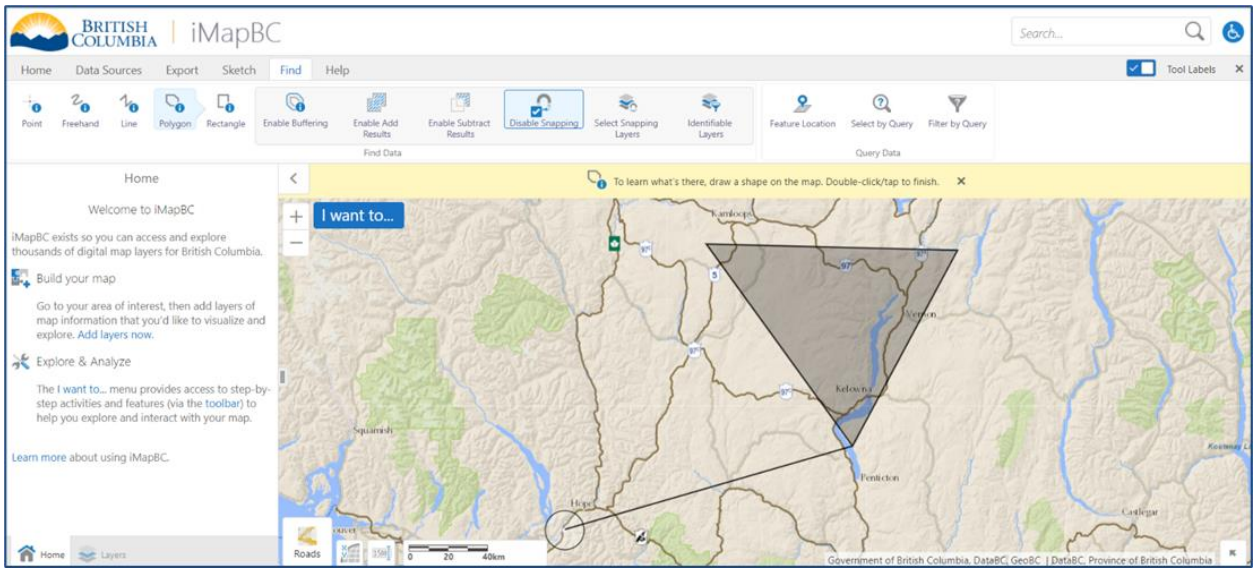
4. A new tab will appear along the bottom of the information panel, clicking that will bring up a new window in the information panel (pictured left).

5. Input the distance you want, including unit of measurement, click continue and it will change your results.

Enable Snapping



When drawing an identify shape, you can snap your points to existing markups on the map by clicking ‘Enable Snapping’ in the toolbar. Snapping makes it easier to follow to the exact points on the markup. To disable snapping click the same button, now labeled ‘Disable Snapping’.



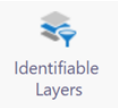
1. Choose a tool to draw a shape.
2. Click ‘Enable Snapping’.
3. A circle around the mouse appears and the vertex (white square) will snap to the existing markup edge. This prevents any overlap or missed area.

Only drawn features can be used for snapping. BCGW layers are not enabled for snapping.

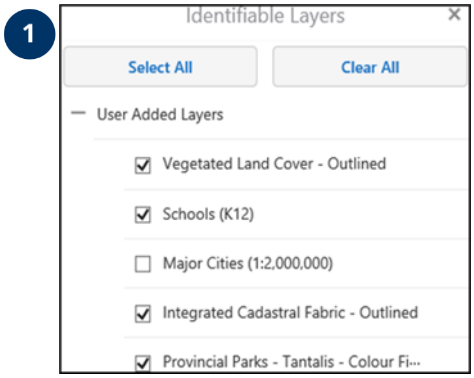
Select Snapping Layers

Layers are currently not enabled for snapping in iMapBC. The feature will be added in a later update.

Identifiable Layers



The 'Identifiable Layers' option lets you select which layers the identify tool will query. Query in mapping terms is about setting conditions that will help you filter your data and get more specific results.



1. Layers with a check mark will be returned in the search 'Identify Results' window.

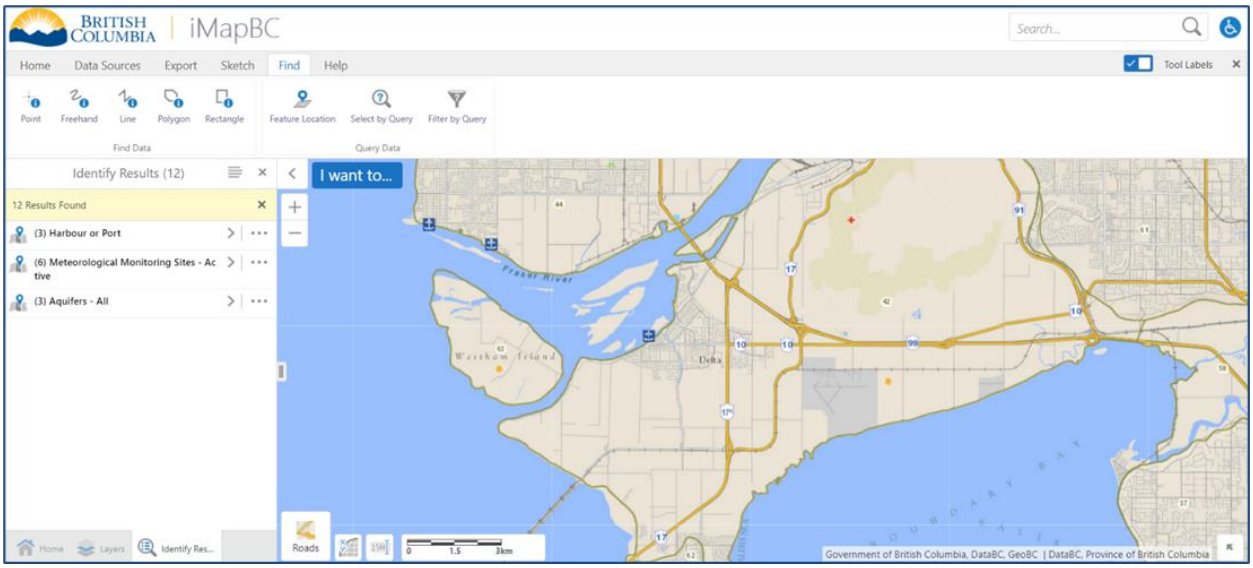
2. You can deselect any of the layers by clicking again to remove the check mark.

Working with Results

The 'Identify' tool, 'Search Box', and the 'Query Tools' show you results in the 'Search Results' window. The 'Results' window includes many different options. These options change the layers, and the way information is reported and shown.

Results Overview

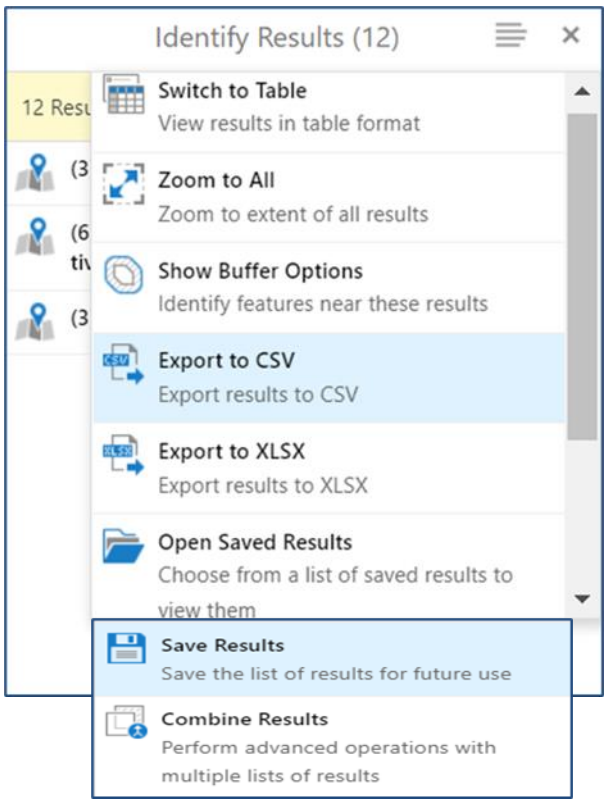
This section will cover all the menus relating to results and their presentation.



Each feature in the area searched will be in the results list in the information panel.

Click the ‘Results List Menu’ (to the left of the x) for other options (Shown below). You can also click on any of the results to get more information and zoom to it on the map window.

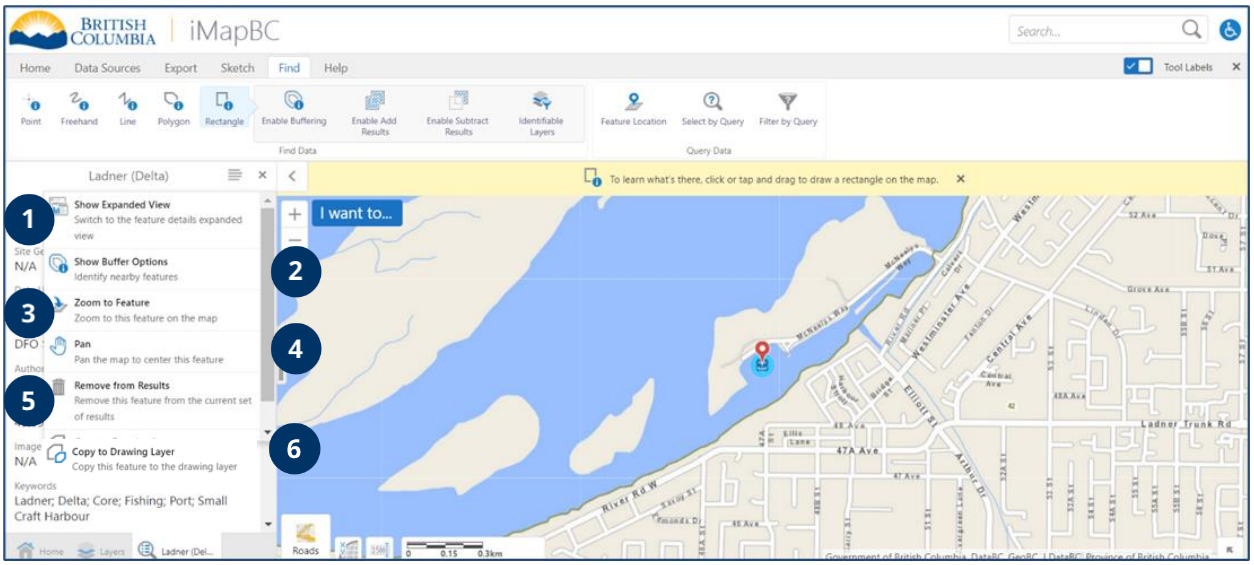
The advanced menu offers many features that can be confusing to users, here is a brief overview of the features.



1. ‘Switch to Table’ shows your data in a table format.
2. ’Zoom to All’ zooms in to see the full area you selected.
3. ‘Show Buffer Options’ lets you check the other features around the identified spot.
4. ‘Export to CSV’ and ‘Export to XLSX’ exports results to their file type and onto your computer.
5. ‘Open Saved Results’ opens your last saved results lists.
6. ‘Save Results’ saves the results list, which can be opened again by open saved results.
7. ‘Combine Results’ adds saved results with the current results.

Detailed Result Menu Options

Once you select a result the detailed result information is displayed. Along with displaying the detailed result information, the ‘Detailed Result Menu’ is available.



1. ‘Show Expanded View’ gives full details for the point, from when the point was last updated, to their contact info.

2. ‘Show Buffer Options’ allows the feature to be used to then ‘identify’ other features shown on the map.

3. ‘Zoom to Feature’ zooms the map to the feature.

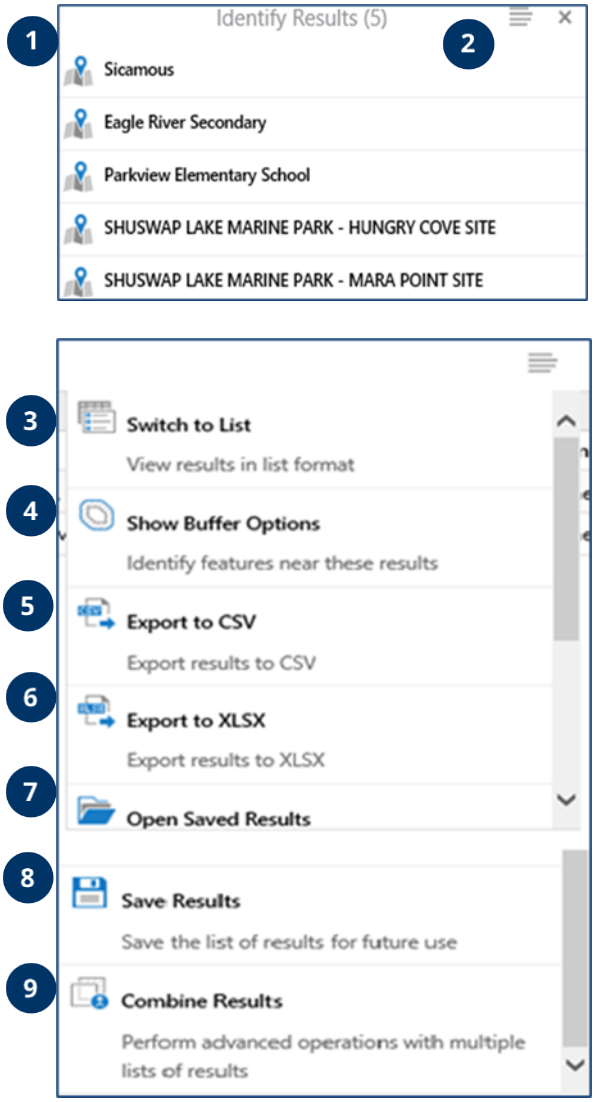
4. ‘Pan to Feature’ moves the map to the feature without changing the map scale.

5. ‘Remove from Results’ removes the feature from the ‘Results List’.

6. ‘Copy to Drawing Layer’ adds the specific point to your results when drawing on the map.

List View and Table View

The ‘List View’ and ‘Table View,’ options are two different ways of viewing search results. This will show you all the options advanced menu offers.



1. The ‘List View’ is the default view for the viewing the ‘Results List’, always shown on the information panel.

2. Click the button (to the left of the x) to open the advanced menu.

3. ‘Switch to List’ switches the results to list format.

4. ‘Show Buffer Options’ lets you use buffer to ‘identify’ other features shown on the map.

5. ‘Export to CSV’ exports the results to a CSV (comma separated values) file for external use.

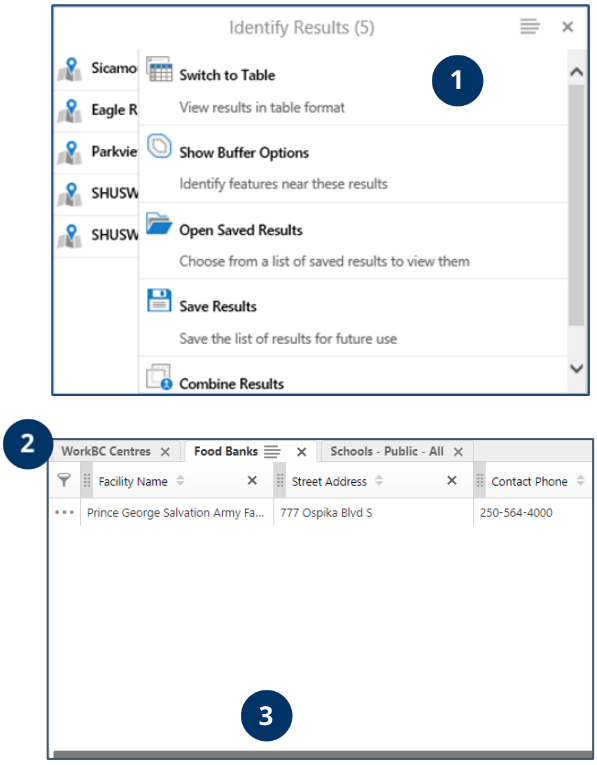
6. ‘Export to XLSX’ exports the results to a Microsoft Excel file for external use.

7. ‘Open Saved Results’ opens a previously saved results list.

8. ‘Save Results’ saves the results list so it can be used later.

9. ‘Combine Results’ allows for many saved result lists to be combined.

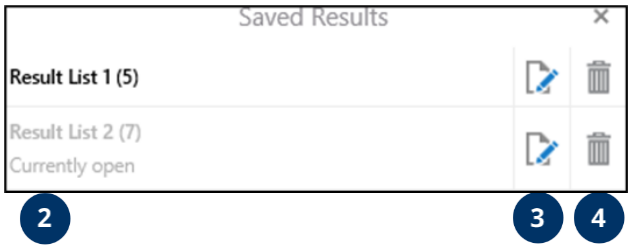
Get to the ‘Switch to Table’ view option by using the ‘Identify’ tool on your data, clicking ‘Results List Menu’ option and selecting ‘Switch to Table’. This version shows points in much more detail.



1. From the advanced menu, click on ‘Switch to Table’, this will open table view for your data (pictured below).
2. Features are shown in a table format and sorted by layers. Switch to other layers by clicking the tab along the top of the ‘Table View’.
3. Scroll through all the attributes / text information for the feature by using the slider at the bottom of the ‘Table View’.

Open Saved Results

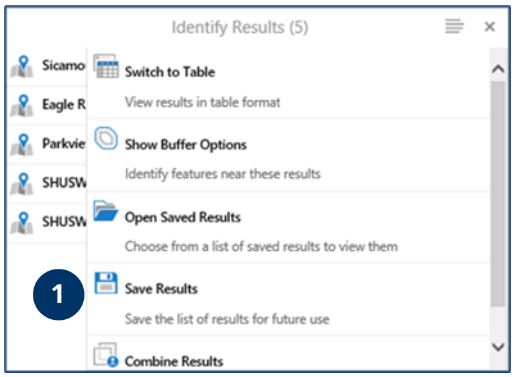
The ‘Open Saved Results’ function allows the user to access, edit, and delete saved result lists. To view the ‘Saved Results’ screen, click the ‘Results List Menu’ and select the ‘Open Saved Results’ option.

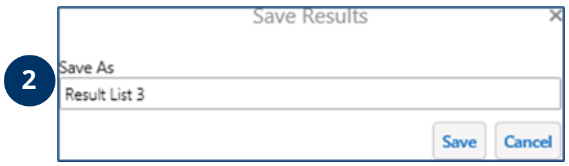


1. Click ‘Open Saved Results’.
2. Click on a saved ‘Result List’ to open the list.
3. Click ‘Edit List Name’ to rename the result list.
4. Click ‘Delete List’ to remove the result list from the Saved Results screen.

Save Results

The ‘Save Results’ function allows the user to save a result list to the project.



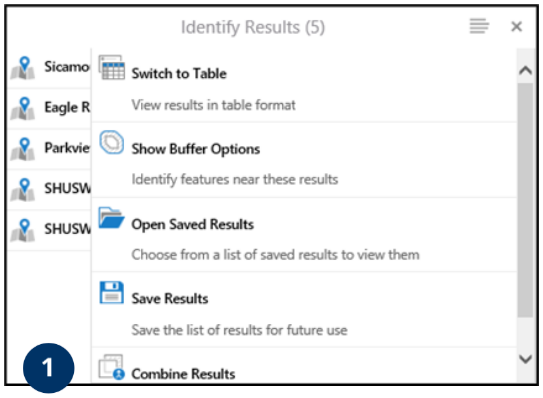


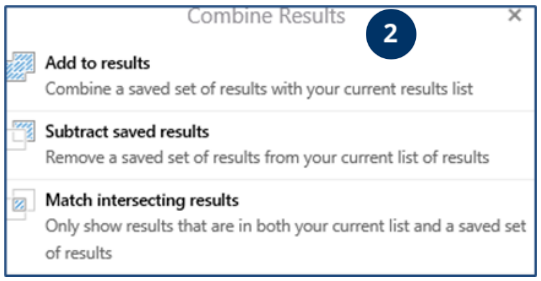
1. To save a result list to your project, click ‘Results List Menu’ and select ‘Save Results’.

2. Give the Result List a name and click ‘Save’.

Combine Results

‘Combine Results’ lets you change results lists and all their information. You can add results together, subtract them, or matching results from two lists.



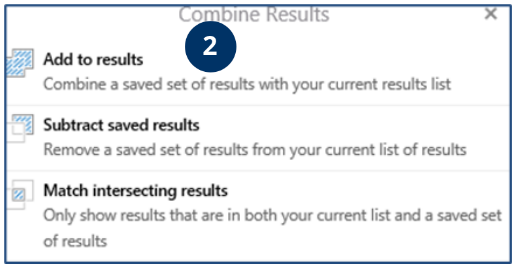


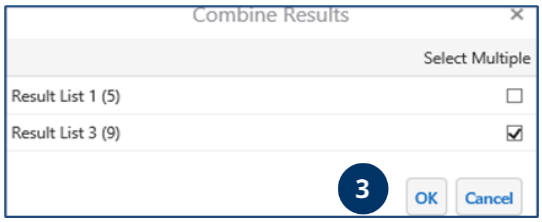
1. To combine result lists, click the ‘Results List Menu’ and click ‘Combine Results’.

2. The ‘Combine Results’ screen will open.

Add to Results

Continuing from ‘Combine Results’, ‘Add to Results’ combines a saved set with your current result list.





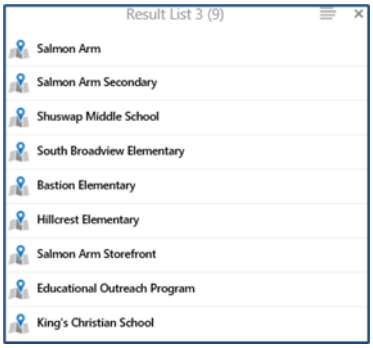
1. Once you have made your current select, click ‘Results List Menu’ and select ‘Combine Results’.

2. ‘Combine Results’ screen will open. Select ‘Add to Results’.

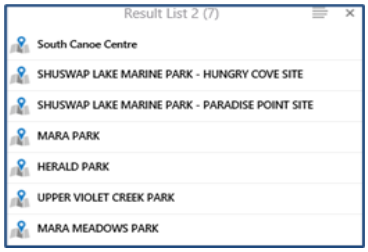
3. Put a check next to the saved result list to combine with your current selection. Click ‘OK’.

4. Your results will be combined.

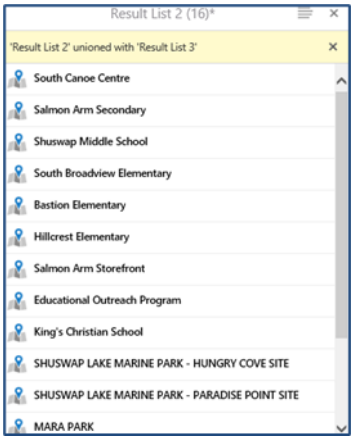
Current Result List



Saved Result List



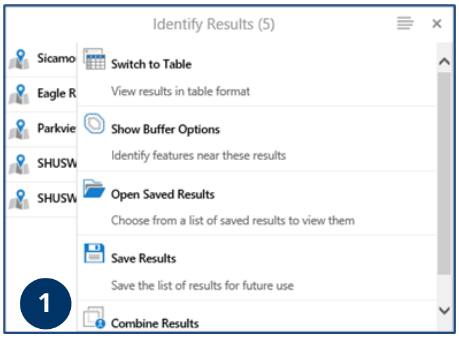
Combined Result List

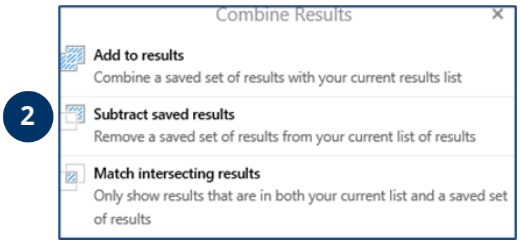


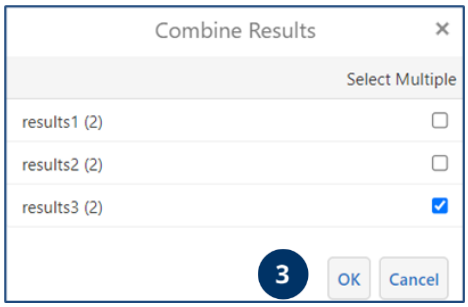
If a feature is selected in multiple result lists, it will only exist once in the final combined result list.

Subtract Saved Results

'Subtract Saved Results' removes specific data from your current list.







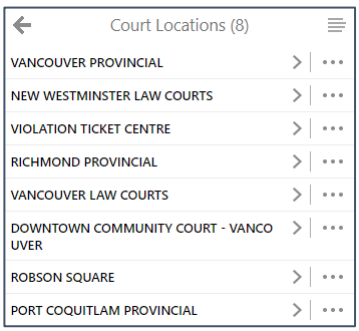
1. Once you have made your current select, click the 'Results List Menu' and select the 'Combine Results' option.

2. The 'Combine Results' screen will open. Select the 'Subtract saved results' option.

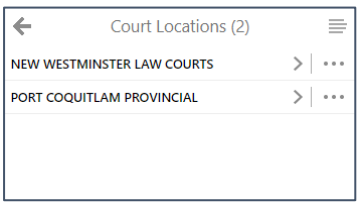
3. Put a check next to a saved result list to subtract from your selection. Click 'OK'.

4. It will remove everything captured from the first list that is also in the subtracted list.

Current Result List



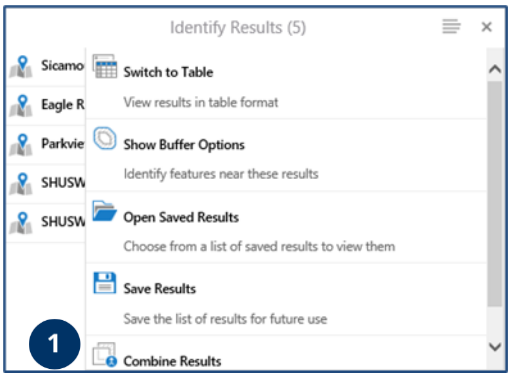
Subtracted Result List

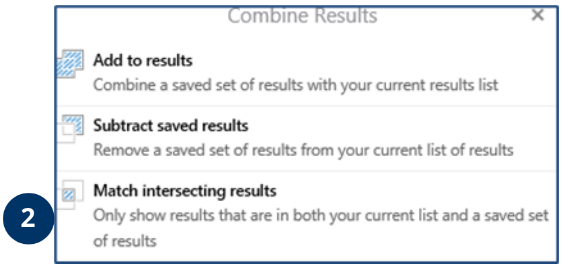


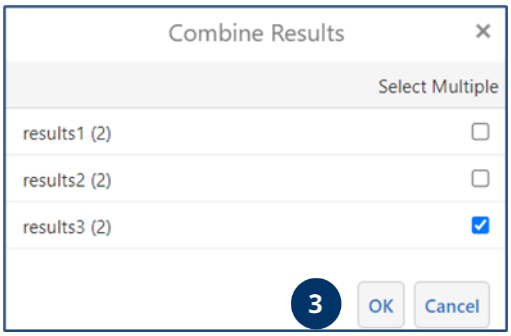
Final Results List

Match Intersecting Results

'Match Intersecting Results' returns a list of results of only features that match between your current selection and selected saved result lists.







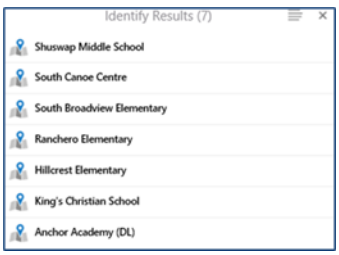
1. Once you have made your current select, click the 'Results List Menu' and select the 'Combine Results' option.

2. The 'Combine Results' screen will open. Select the 'Match intersecting results' option.

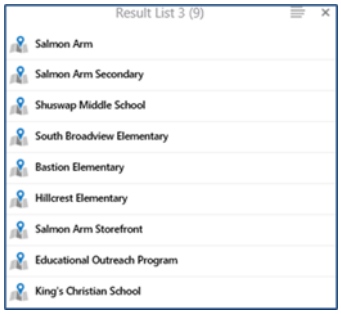
3. Put a check next to a saved result list to subtract from your selection. Click 'OK'.

4. Only the features that exist in both lists will be returned to the final intersecting result list.

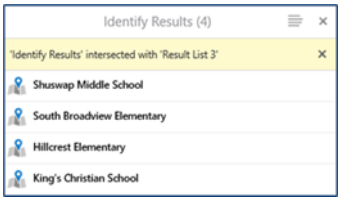
Current Result List



Saved Result List

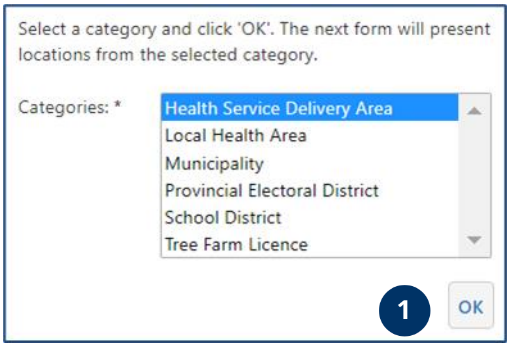


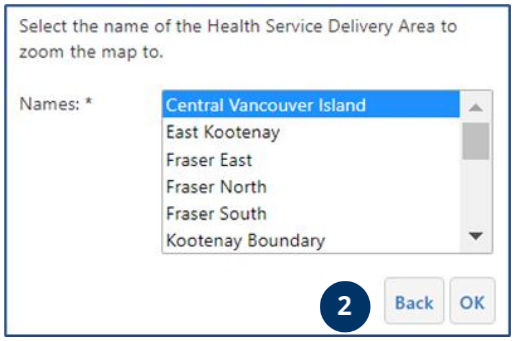
Intersecting Result List



Feature Location

'Zoom to Feature Location' shows a list of geographic areas that can be zoomed to in two-steps:





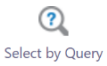
1. Pick the geographic area you would like to zoom to and click 'OK'.

2. A second pick list will be presented with specific features from the layer selected. Select the feature from the specific features pick list and click 'OK'.

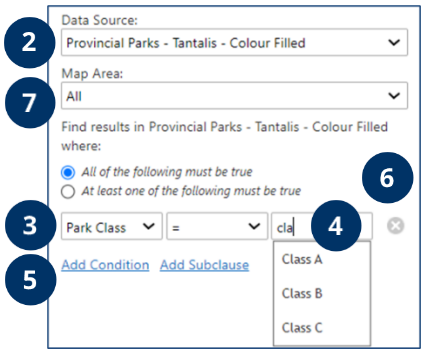
The map will then be zoomed to the selected feature's location.

This tool does not add the layers to the map window. Use the 'Add Provincial Layers' tool to add the layers to view them in the map window.

Select by Query



'Select by Query' lets you make queries without knowing how to write SQL statements. Results are show in the information panel, like 'Identify' results.



1. Click the 'Select by Query' tool under the 'Find' tab.

2. Select the layer you want to query from the 'Data Source' drop-down list.

3. Pick the attribute from the 'Field' list that you want to include in the first part of your query statement. For example, select 'Park Class'.

4. From the 'Operator' drop-down list, pick the operator. For example, select '=' in the 'Value' field, and type in the value you want to query. For example, type 'Cla'. As you type, a list of options for this value will become displayed.

5. If you want to make the statement more specific, click 'Add Another Condition' and define another set of parameters.

6. To remove a condition, click the 'X' icon.

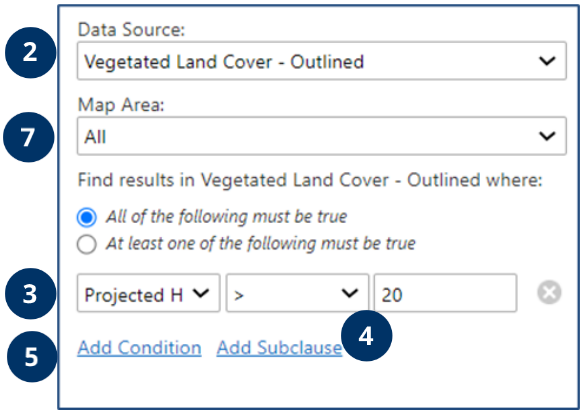
7. Optionally, a 'Spatial Filter' can be added in 'Map Area', This lets the user define if the query will only search in the map extent or map drawings.

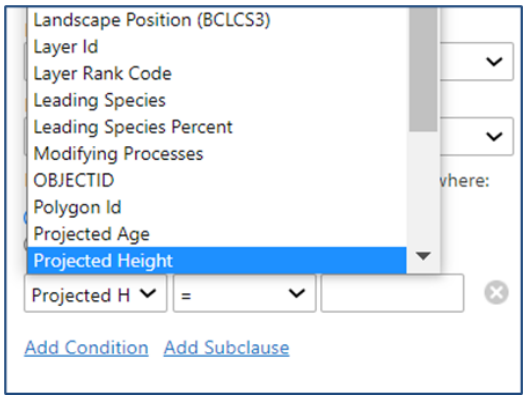
8. Click 'Search'. Your query results will be shown in the information panel on the right.

> Query attribute values are case sensitive. The list of generated attribute values is not. It is usually best to select an option provided from the drop-down list of results to ensure your query uses the correct attribute value.

Filter by Query

'Filter by Query' lets you make conditions that will hide features on a layer that do not meet them.





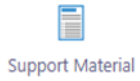
1. Click 'Filter by Query' under the 'Find' tab.
2. Select the layer you want to query from the 'Data Source' drop-down list.
3. Select the field from the 'Field' drop-down list that you want to include in the first part of your conditions. For example, select 'Projected Height'.
4. From the 'Operator' drop-down list, select the operator. For example, pick '>'. In the 'Value' field, type in the value you want to query. Type '20'. As you type, a list of possible options for this value will be shown.
5. If you want to make the statement more specific, click 'Add Condition' and set its conditions.
6. A 'Spatial Filter' can be added in 'Map Area'. This allows the user to define if the query will only search in the map extent or map drawings.
7. Click 'Filter', and your filter will be shown in the map window.

The Identify tools will not give results for items affected by a filter.

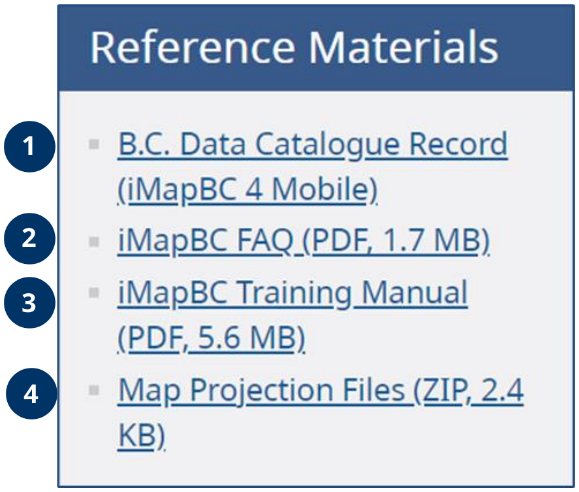
Help

Users may require additional information regarding the iMapBC application. Additional help can be accessed using this section.

Help Tab Tools



The ‘Help’ tab contains tools that allow the user to get more information regarding iMapBC. Clicking ‘Support Material’ brings you back to the iMapBC launch page with reference materials.



1. The Data Catalogue Record links you to the Metadata page for iMapBC.
2. The ‘FAQ’ tool opens the iMapBC Frequently Asked Questions PDF in a separate window.
3. The ‘Training Manual’ tool opens the iMapBC training manual in another window.
4. The Map Projection Files is a quick download in the form of a ZIP file.

Questions or Reporting Issues with iMapBC

Issues with iMapBC can be reported to the Natural Resource Ministries Helpdesk:

Hours of Operation: 8:00 a.m. - 4:00 p.m. (PST/PDT), Monday to Friday (excluding holidays)

Phone (within Victoria): 250-952-6801 (Option 1)

Toll Free (within BC): 1-866-952-6801 (Option 1)

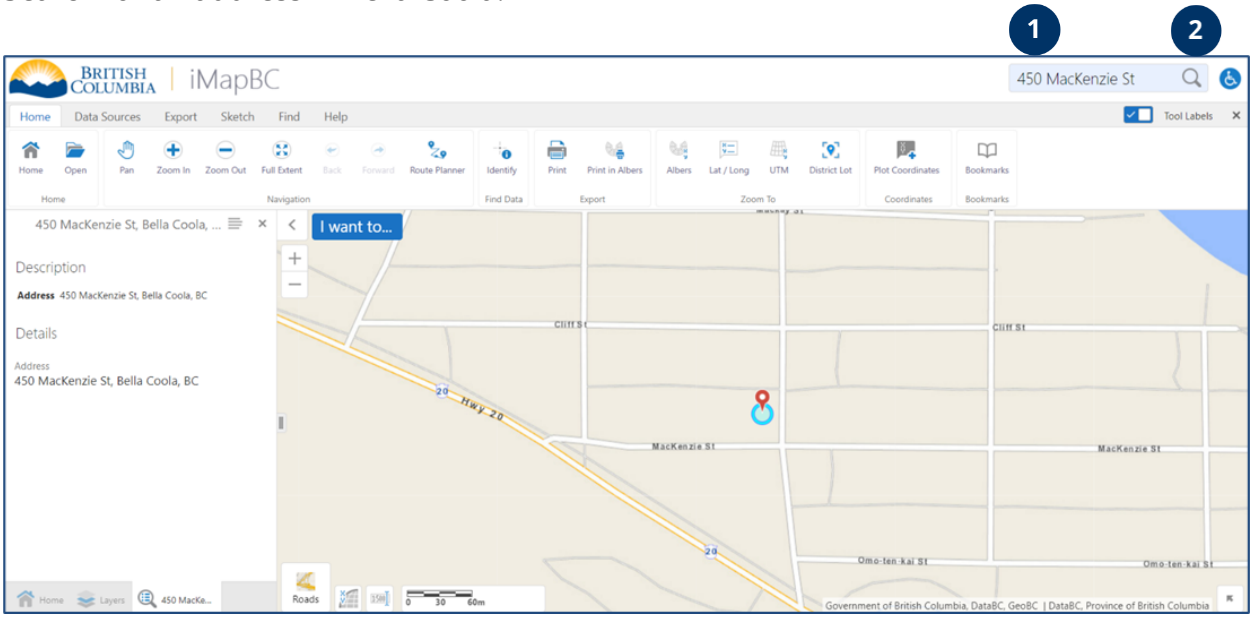
NRMenquiries@gov.bc.ca

Appendix A: Training Exercises

These are some exercises that will help you understand iMapBC better.

Exercise 1: Search for an Address

Search for an address in Bella Coola.



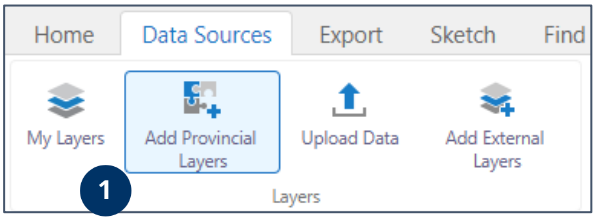
1. Type ‘450 MacKenzie St’ in the Search Box.
2. Click the ‘Begin Search’ icon.

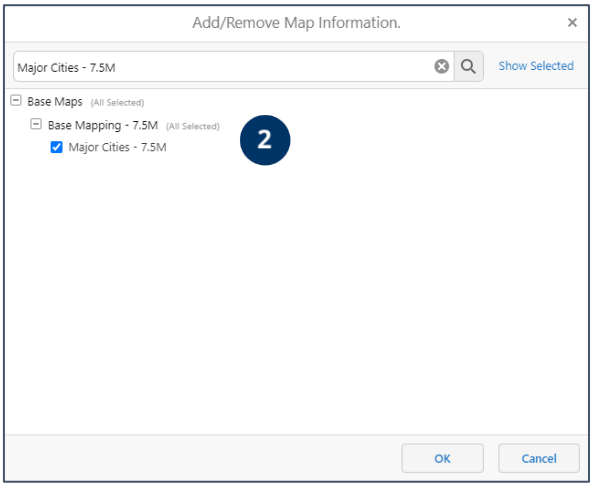
When the results come back, click on the address listed as 450 MacKenzie St, Bella Coola, BC. It will zoom to there and give you some more information.

- End of exercise –

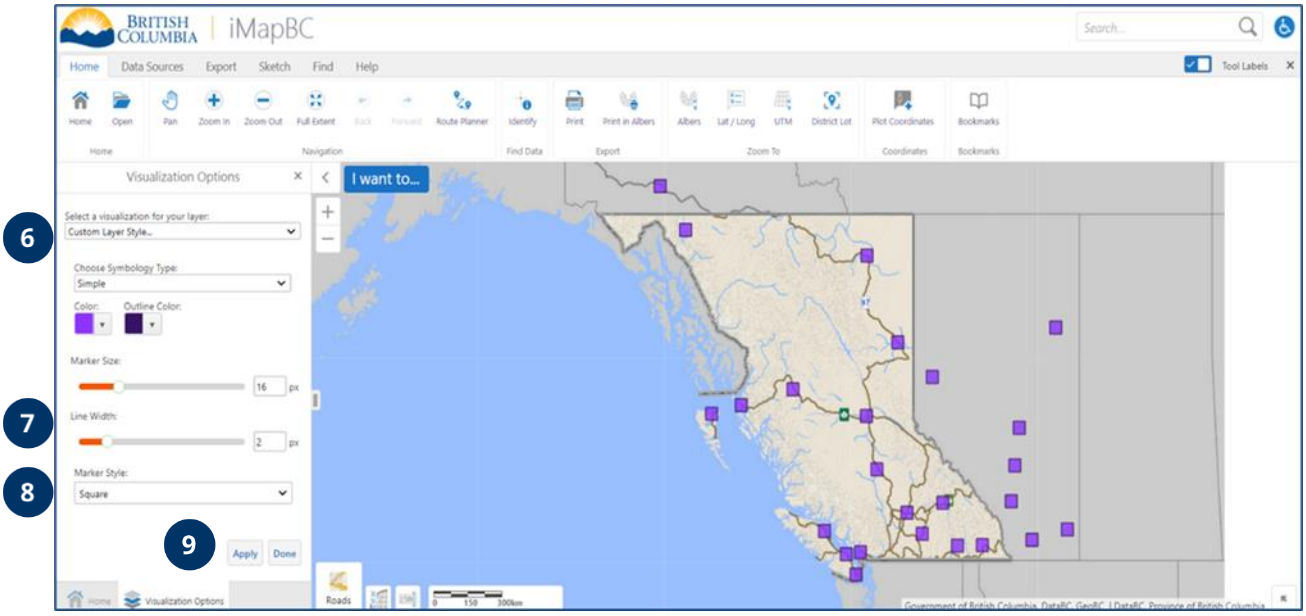
Exercise 2: Change Point Symbology

Change the size and colour of the Major Cities on the map.





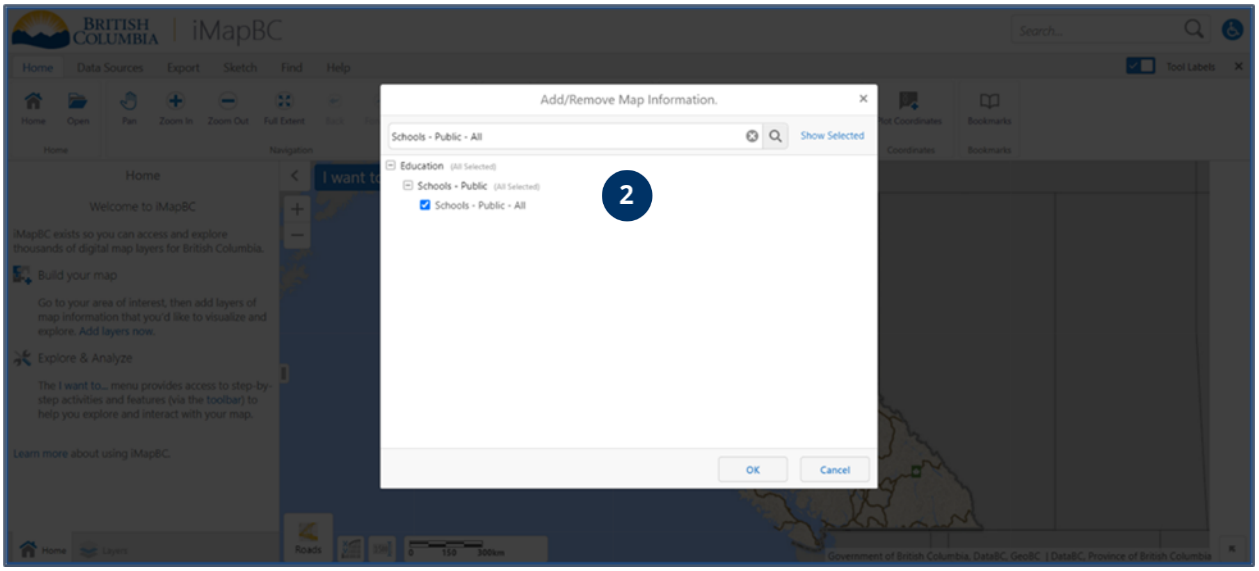
1. On the 'Data Sources' tab, click 'Add Provincial Layers'.
2. Under Base Maps, put a check next to 'Major Cities – 7.5M' and click 'OK'.
3. Click the 'Layers' Information Panel Icon.
4. In the Layers list, click the arrow to the right of the 'Major Cities – 7.5M' layer.
5. In the Layer Options screen, select 'Turn on/off layer Visualization'.
6. In the Visualization Options screen, change it to 'Custom Layer Style...'.
7. Change the Marker Size to '16 px'.
8. Change Marker Style to 'Square'.
9. Click 'Apply', then 'Done'.



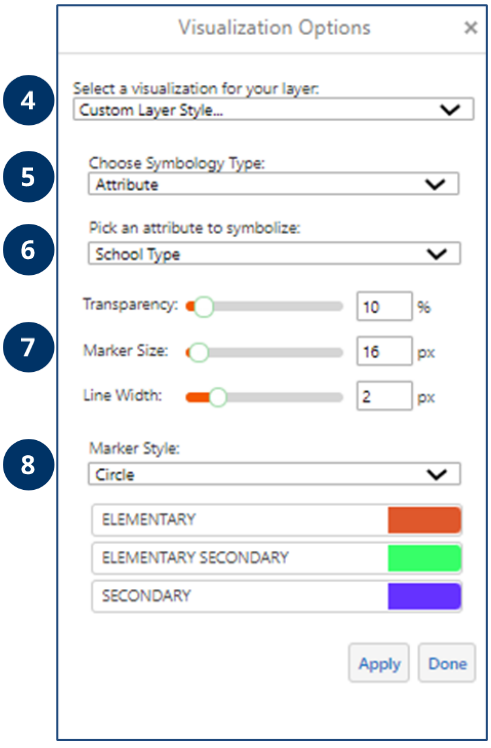
- End of exercise –

Exercise 3: Symbolize by Attribute

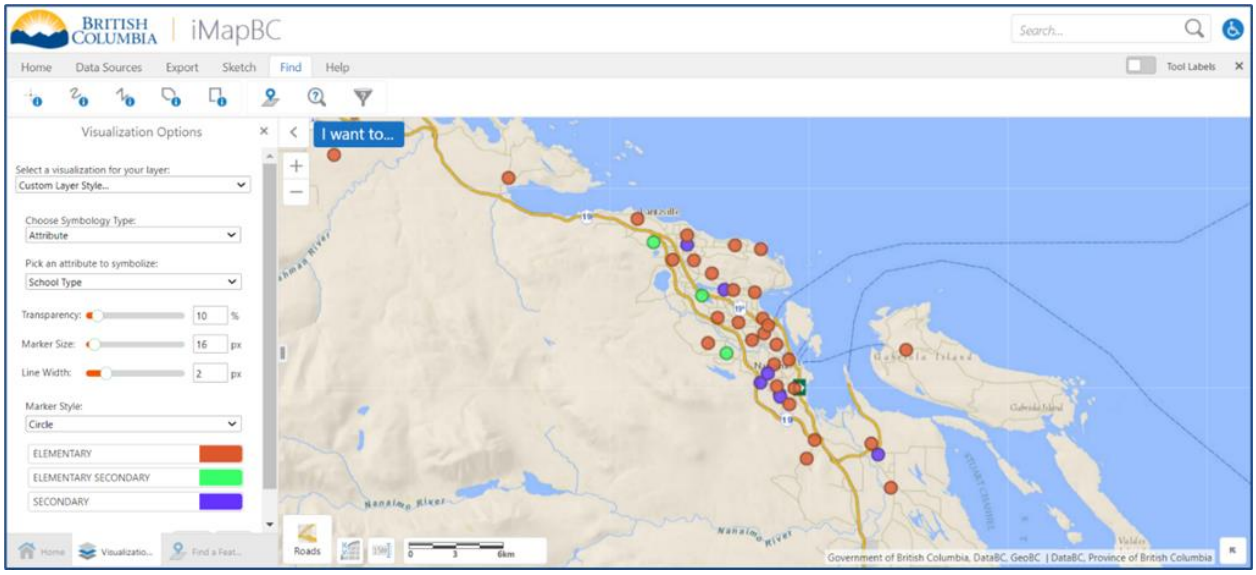
Show the different kinds of public schools on a map with this exercise.



1. On the ‘Data Sources’ tab, click the ‘Add Provincial Layers’ tool.
2. Under Education > Schools-Public, put a check next to ‘Schools-Public-All’ and click 'OK'.



3. In the Layer Options screen, select ‘Turn on/off layer Visualization’.
4. Change the visualization it to ‘Custom Layer Style...’.
5. ‘Change ‘Choose Symbology Type’ to ‘Attribute’.
6. Set the ‘Pick an attribute to symbolize’ field to ‘School Type’.
7. Change the Marker Size to ‘16 px’.
8. Change the Marker Style to ‘Circle’.
9. Change the Colours by clicking on each class. Click ‘Apply’.



The layer visualizations will be updated in the map window (shown above).

- End of exercise –

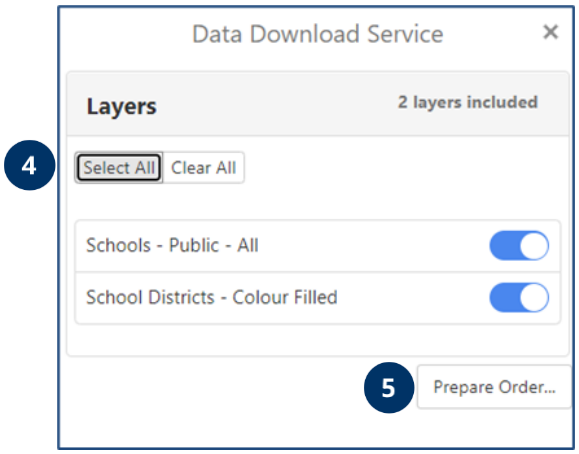
Exercise 4: Provincial Layer Download

Use this exercise to learn more about school locations and school districts.

1. In the 'Data Sources' tab, click 'Add Provincial Layers'.

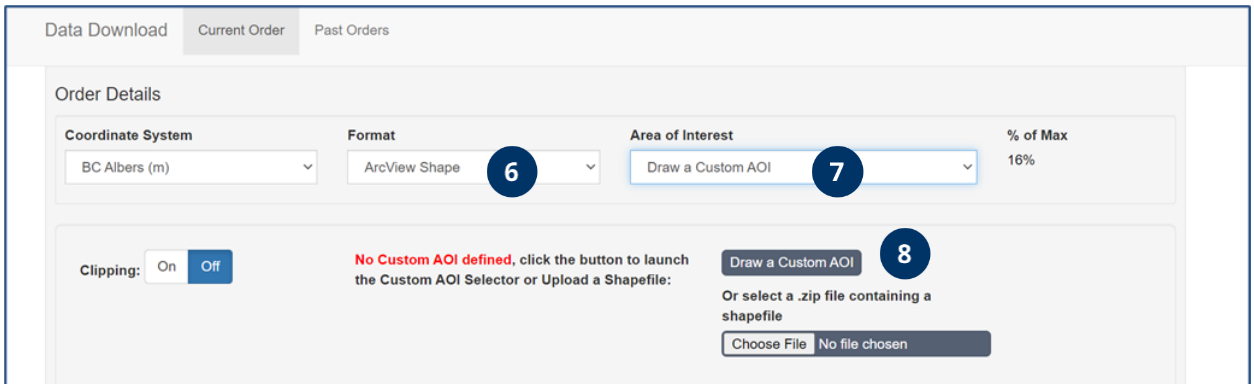
2. Under Education > 'Schools-Public, put a check next to 'Schools-Public-All'. Then click Education > School Districts, put a check next to 'School Districts – Colour Filled' and click 'OK'.

3. In the 'Export' tab, click 'Provincial Layer Download'.



4. In the Data Download Service screen, click 'Select All' or click each of the toggles for the School Districts – Colour Filled and Schools-Public layers.

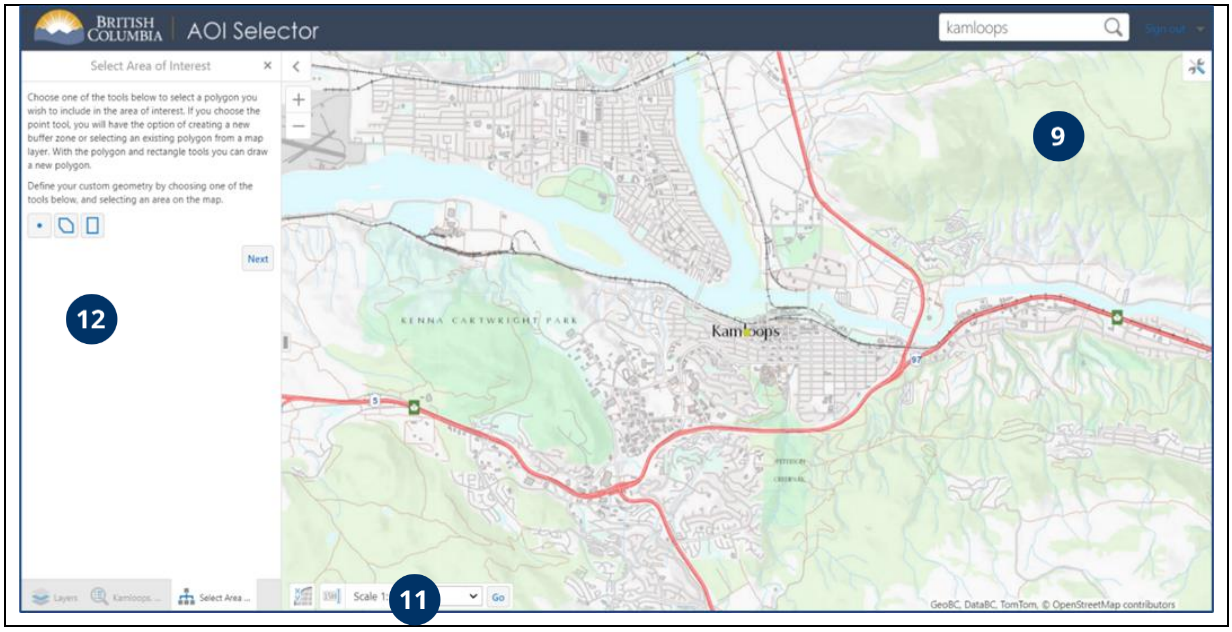
5. Click 'Prepare Order...', a new window will open.



6. In the Order Details window: Set the Coordinate System to 'BC Albers (m)'. Set the Format to 'ArcView Shape'.

7. Set the Area of Interest to ‘Draw a Custom AOI’.

8. Click ‘Draw a Custom AOI’.

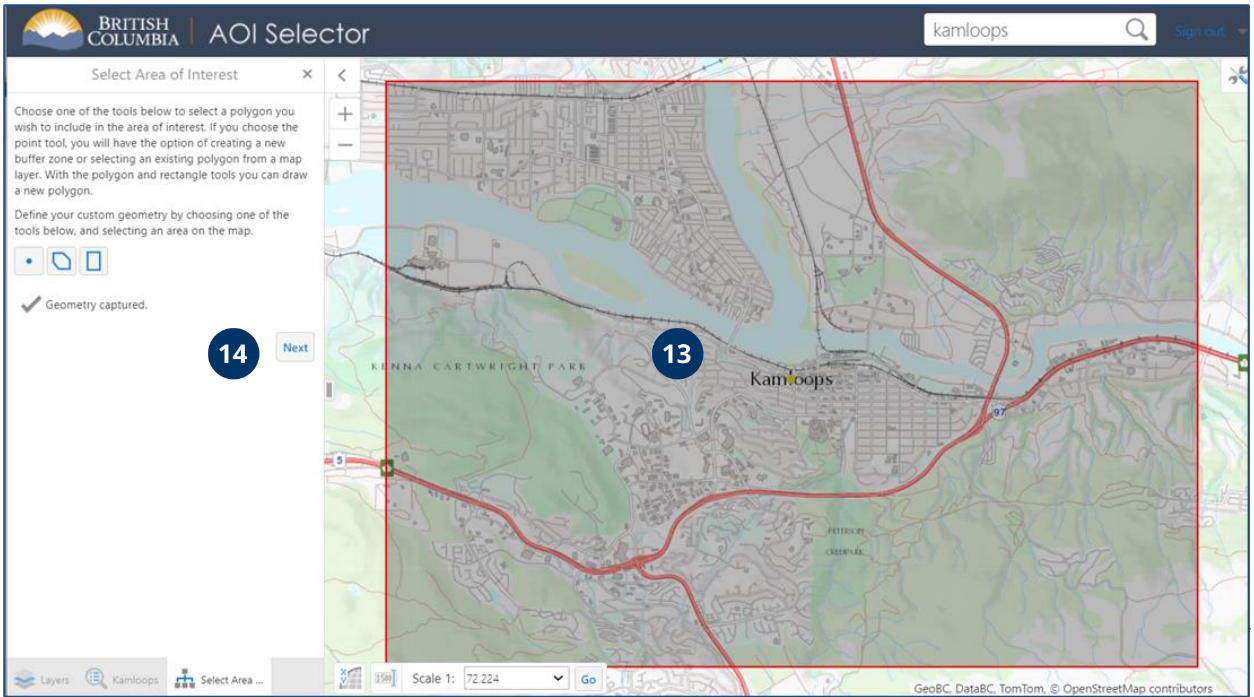


9. The AOI Selector map window opens. In the search box, search ‘Kamloops’.

10. In the Search Results screen, click the top result titled ‘Address: Kamloops, BC’.

11. Click in the scale box and set the scale to ‘1:72,224’.

12. Click the rectangle option in ‘Select Area of Interest’.



13. Click ‘Draw Rectangle’ and click and drag in the map window to draw a rectangle, like the one shown above.

14. When you are done the Select Area of Interest window will display ‘Geometry Captured’. Click ‘Next’, then ‘Submit AOI’. The order details screen will reopen. The % of Max size will be updated.

15. Enter your Email and agree to the Terms and Conditions.

16. Click ‘Submit Order’.

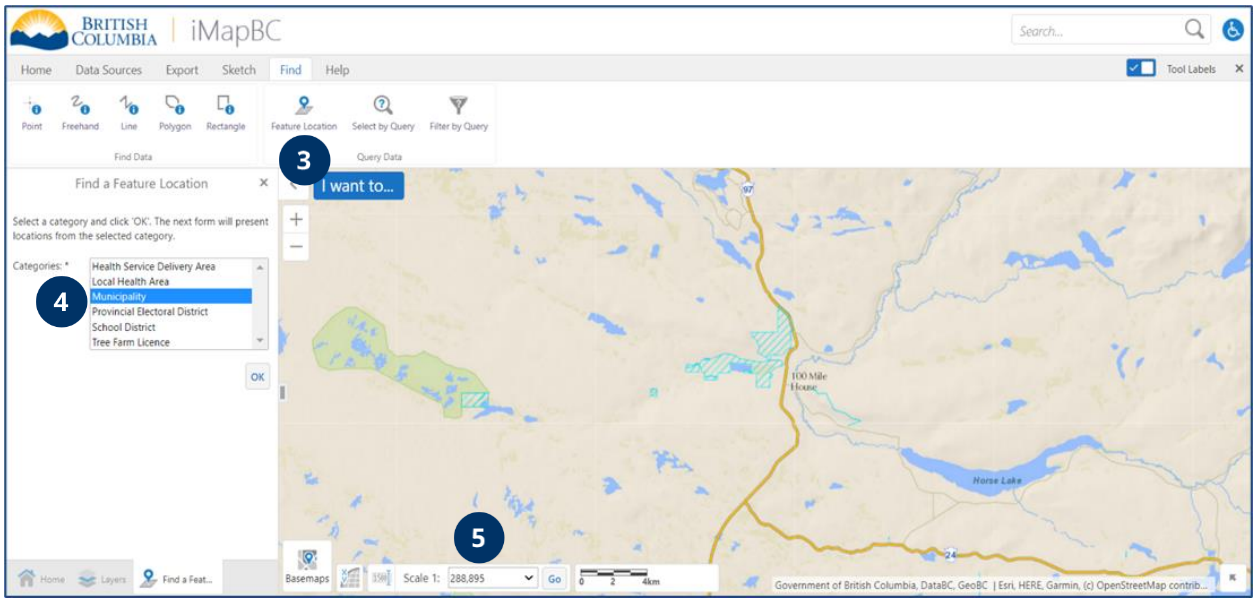
17. You will get two emails, the order submission email, and the order assembled email. In the order assembled email, click the provided URL to see your information. You may need to enter your login credentials if you used the username required version of iMapBC.

> If you cannot see ‘Submit Order’ and there is no slider bar, you will need to press the ‘Ctrl’ and ‘-‘ (minus) keys together to reduce the browser window text size.

- End of exercise –

Exercise 5: Select by Query

Output a list of all Crown Tenures for Agriculture under lease.



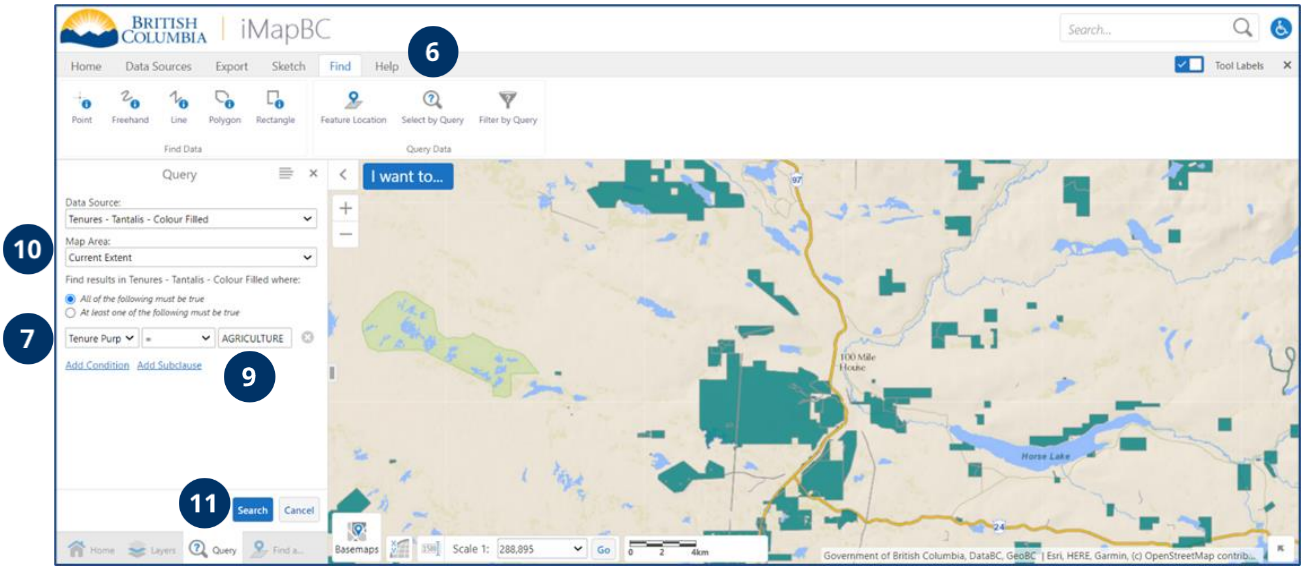
1. Under ‘Data Sources’, click ‘Add Provincial Layers’.

2. Under Land Ownership and Status > Crown Tenure – All – Tantalis, put a check next to ‘Tenures – Tantalis – Colour Filled’ and click ‘OK’.

3. In the ‘Find’ tab, click ‘Feature Location’.

4. Select ‘Municipality’ and click ‘OK’. Select ‘100 Mile House’ and click ‘OK’.

5. Set the scale to ‘1:288,895’.



6. In the ‘Find’ tab, click ‘Select by Query’. In the Query builder dialogue box, set the Data Source to ‘Tenures –Tantalis – Colour Filled’.

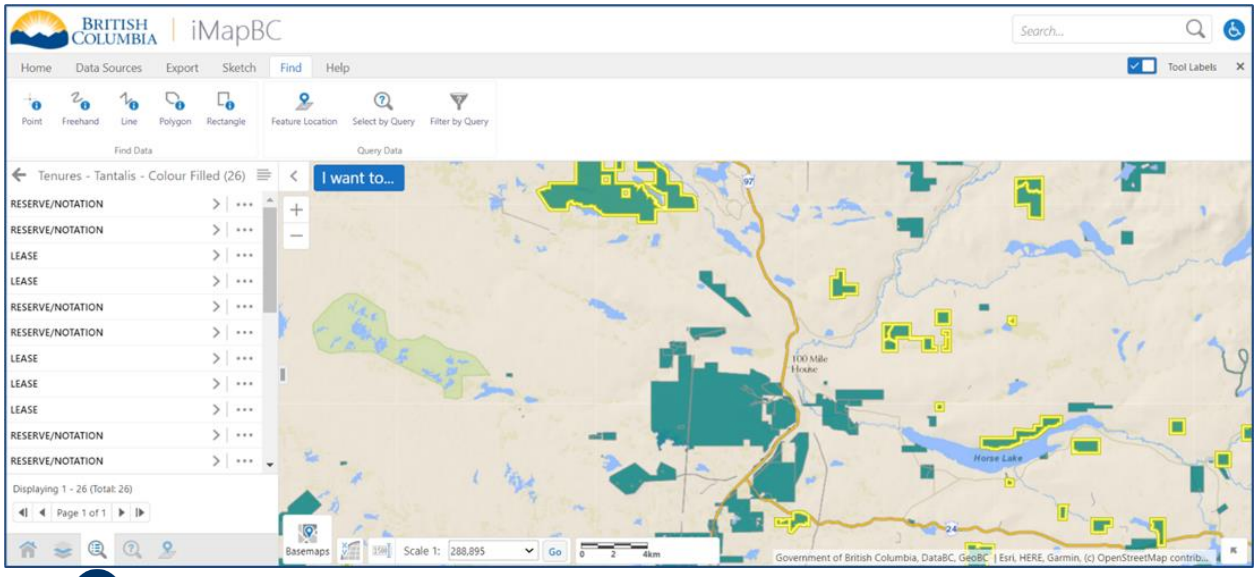
7. Set the Field to ‘Tenure Purpose’.

8. Set the Operators to ‘=’ sign.

9. In Field Value text box, type the word ‘Agriculture’.

10. Set the Map Area option to ‘Current Extent'.

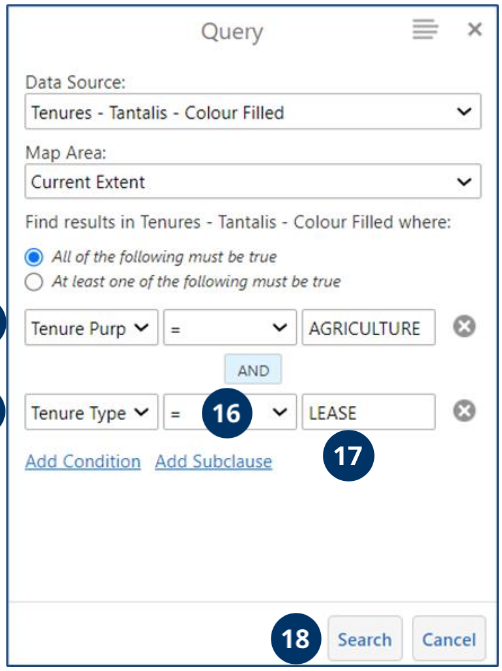
11. Click ‘Search’.

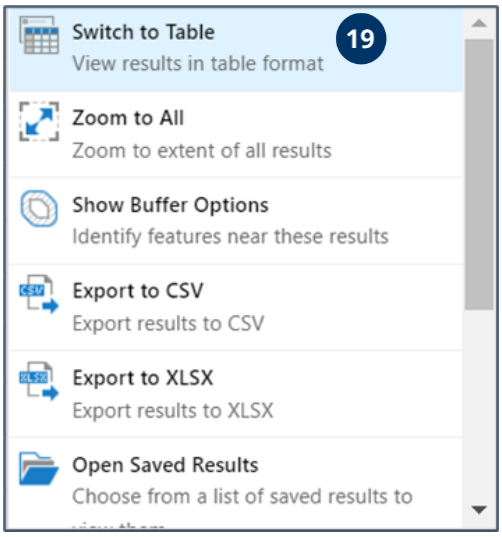


13

12. The query found 26 results (your results may change slightly as the number of results can change based on screen size or updates to the data set). Do not click on any of the search results. Your map view will change, and the rest of this exercise will not work. If your map view has changed return and do step 4 and 5. Zoom back to extent 1:288,895 at 100 Mile House and then go to step 13.

13. To narrow the query to agriculture tenures that are leased, click the ‘Query’ Information Panel Icon.





14. Click ‘Add Another Condition’.

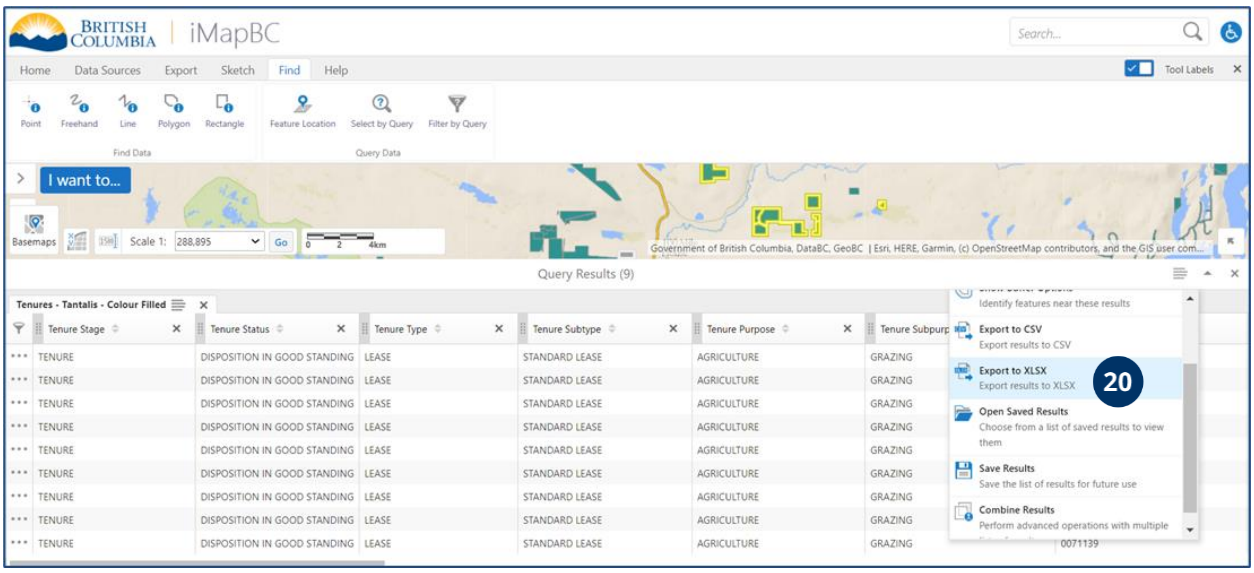
15. Set the Field to ‘Tenure Type’.

16. Set the Operators to ‘=’.

17. In Field Value text box, type the word ‘Lease’.

18. Click ‘Search’. Notice the results this time are 10 (your results may change slightly as the number of results can change based on screen size or updates to the data set).

19. In Query Results, click ‘Options’ and select ‘Switch to Table’.



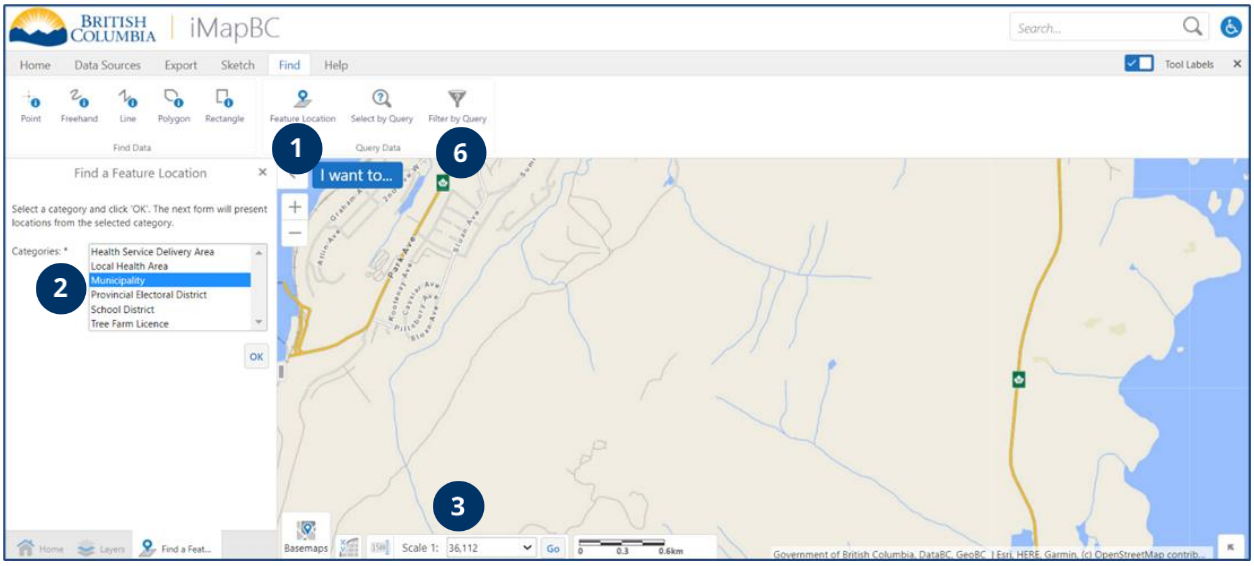
20. In the Table View screen, click ‘Options’ and select ‘Export to XLSX’.

21. In the confirmation window, click ‘OK’. When the download window appears, click ‘Open’. The results will open in Excel.

- End of exercise –

Exercise 6: Filter by Query

View all vegetation polygons around Prince Rupert over 325 years old.



1. In the 'Find' tab, click the 'Feature Location' tool.

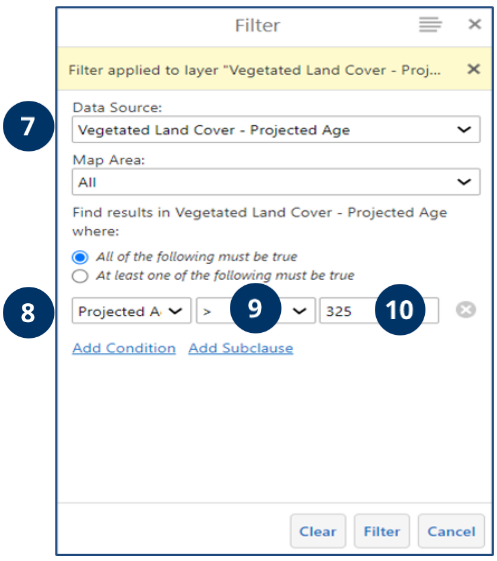
2. Select 'Municipality' and click 'OK'. Select 'Prince Rupert' and click 'OK'.

3. Click in the scale box and set to '1:36,112'.

4. In the 'Data Sources' tab, click 'Add Provincial Layers'.

5. Under Forest Grasslands and Wetlands > Vegetated Land Cover, put a check next to 'Vegetated Land Cover – Projected Age' and click 'OK'.

> If you cannot see the text field, you can readjust the information panel width by clicking and dragging the 'information panel adjustor' icon.



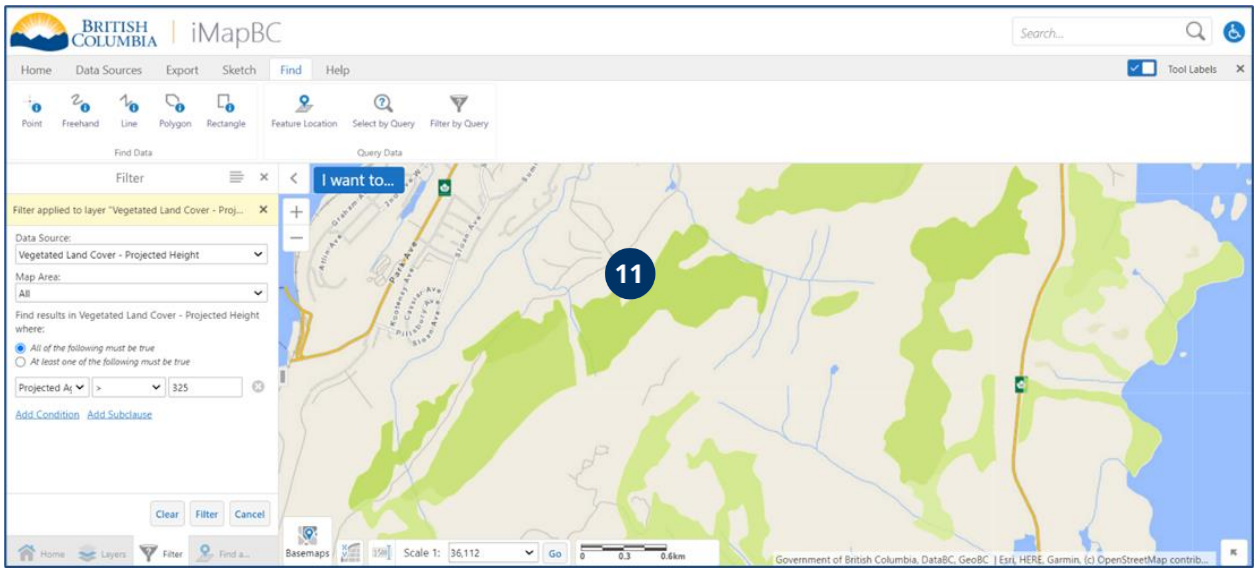
6. In the ‘Find’ tab, click ‘Filter by Query’.

7. Set the Data Source to ‘Vegetated Land Cover – Projected Age’.

8. Set the Field Name to ‘Projected Age’.

9. Set the ‘Operators’ to ‘(>)’.

10. In the Field Value text box, type the value ‘325’.



11. Click ‘Filter’. The map will now only show vegetation stands that are over 325 years in age. All vegetation stands equal or less than 325 years old will not be shown on the map.

- End of exercise –

Appendix B: Finding Content on the DataBC Site

The DataBC Geographic Services web site is the starting point for many services. Try searching the website.

Data Distribution Service

Select and request datasets in a specific file format. This service lets you change the data you have in different ways. You can change file formats, look at specific places on the map, change projections and more.

Web-based Mapping

Look at all B.C. geographic information using web-based map tools and map services.

Location Services (B.C. Physical Address Geocoder, Geomark Web Service, BC Geographical Names Web Service)

Web services that locate things in BC. You can find civic addresses, areas of interest, place names and routes from point A to B. These services are meant to be used by businesses.

Topographic Data

Topographic data shows British Columbia's terrain, elevation, and land features. The topography of B.C. is used to create maps of the provincial land base.

Land Use

The Provincial Government manages all data determining land ownership, rights, and jurisdiction in British Columbia. Land that can be owned in B.C. is divided into parcels. Land parcels may be owned by governments, companies, organizations, or persons. A cadaste is a register that describes the ownership, location, and dimensions of land parcels.

Digital Imagery

Imagery provides a sense of the current state of a place, as well as a view into its past condition. Visual data is important for measuring effects on the land of British Columbia. High-resolution images are useful for mapping, research, emergency planning and natural resource management. Anyone can access these images, which show how the province has changed.