

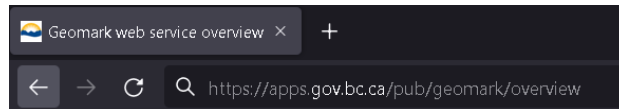
Create Geomark in Google Earth Tutorial

General business example – a potential applicant / user wants to create an area of interest that can be shared electronically to another party – eg: another agency, business partner or First Nations. Use this option if your **Google Earth Pro version is 7.0** or higher.

A geomark can be created within the Google Earth application by copying the **shape** drawn in Google Earth and pasting it into the '**Create Geomark**' form in Google Earth. See [FAQ](#) for details on downloading the most current Google Earth version.

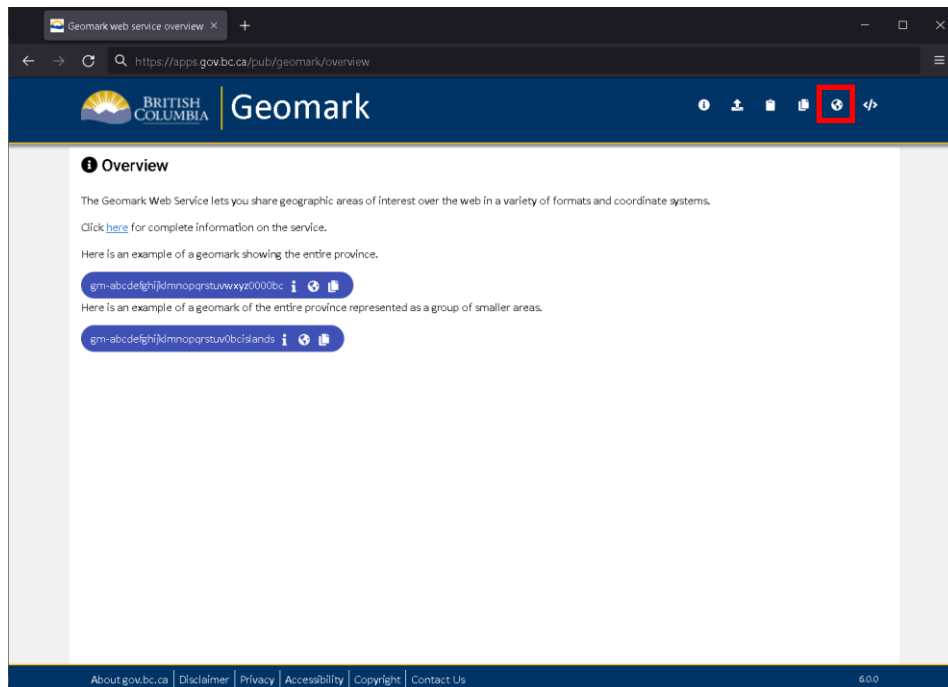
Step 1

Step 1: Using a modern internet browser, click [here](https://apps.gov.bc.ca/pub/geomark/overview) to view the main Geomark Web Service webpage.



Step 2

Step 2: Click on the '**Create in Google Earth**' button in the top right corner of the screen.

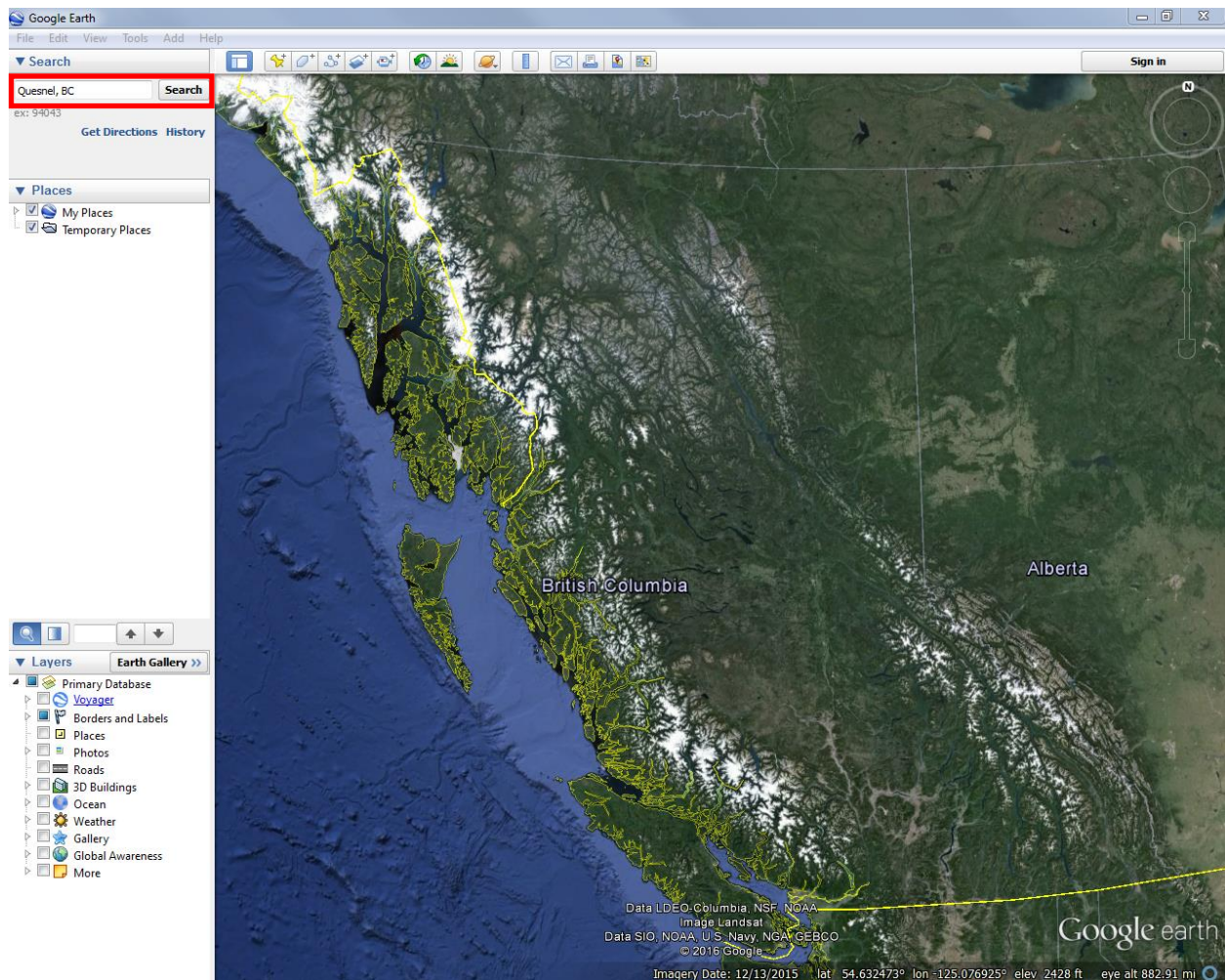


Step 3

Step 3: Select '**Open**' and then '**Allow**' to open the Google Earth tool. Google Earth must be installed on your computer for this to occur. Download [Google Earth](#) to install if required. For government employees, please submit an iStore request.

Step 4

Step 4: To zoom into an area, type the name of a city or a geographic name (such as a river or lake), a coordinate (eg: 49 34.3N, 117 32.1W or 43.23N, 117.34W) or a mapsheet (eg: T0L1A0) in the left navigation window:



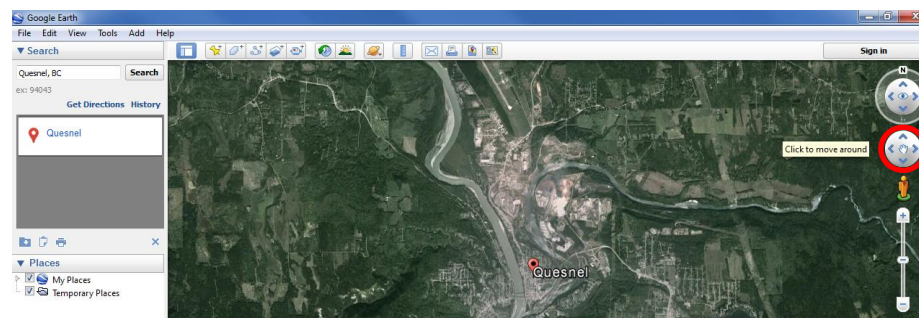
Step 5

Step 5: Click on the **Search** button.

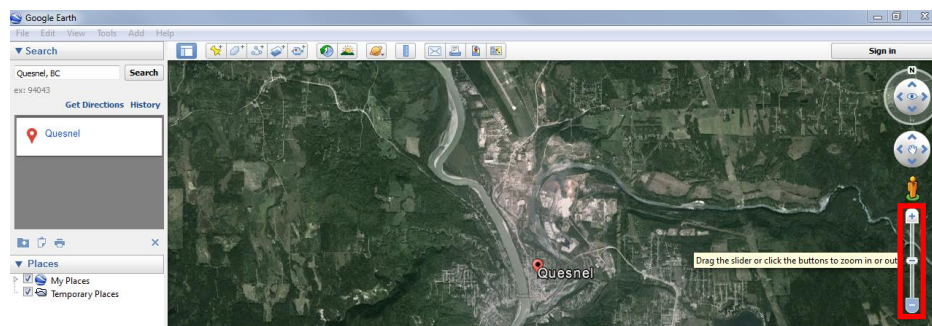


Step 6

Step 6: If you move your mouse in the screen, you'll notice the cursor is now a "hand". By simply holding the left button of your mouse down and dragging it across the screen, you can navigate to another location.



You can also use the navigation tools on the right-hand side of your screen to zoom in or zoom out of the area. Click on the "+" to zoom in or the "-" to zoom out.



Step 7

Step 7: Add Polygon, Path (Line) or Placemark (Point)

7a. You can use the **Polygon** tool to define your area of interest. A polygon is similar to a shape and is used to define areas on a map. The Polygon tool is located on the main toolbar.

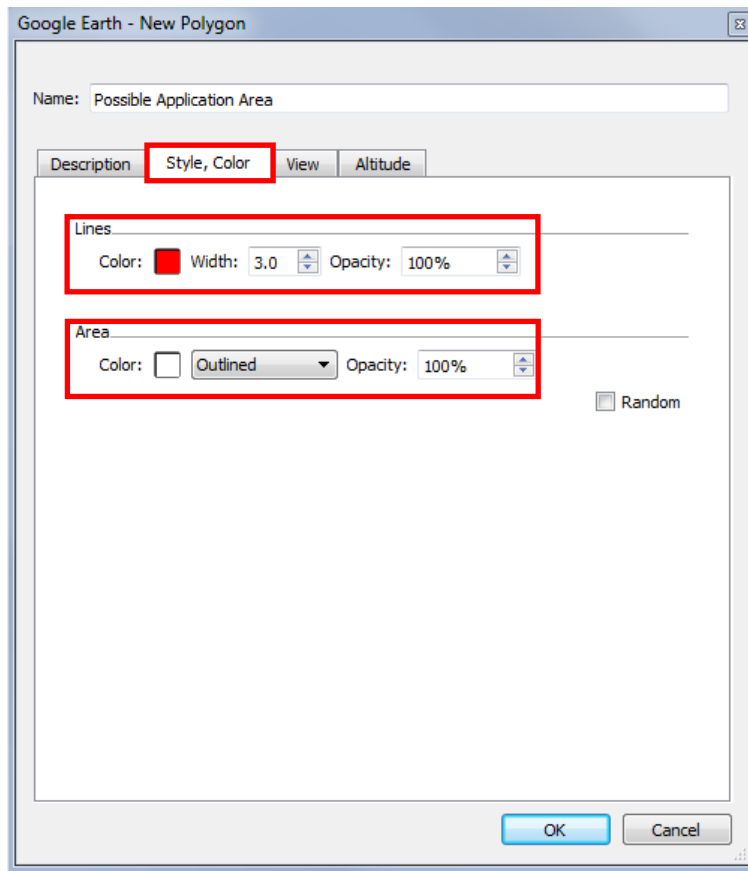


When the '**Add Polygon**' tool is selected, a new screen pops up. Use this screen to name your application area and to note important information about the area. This information may help others (such as FrontCounter BC) process your inquiry.

The screenshot shows a dialog box titled "Google Earth - New Polygon". It has a "Name:" field at the top with the text "Possible Application Area". Below this are four tabs: "Description", "Style, Color", "View", and "Altitude". The "Description" tab is selected and highlighted with a red box. Inside the "Description" tab, there are two buttons: "Add link..." and "Add image...". Below these buttons is a large text area containing the text "I might be interested in applying for this area for a gravel pit." At the bottom of the dialog box are "OK" and "Cancel" buttons.

****Tip - Do not close this box or press OK until your area is defined.***

****Tip - It is recommended to 'Name' your area so it is meaningful and can be recognized (eg: John Doe Private Moorage area of interest). Unique descriptions can be used to define multiple polygons (eg: Cutblock 1, Cutblock 2).***



****Tip – To help capture and visualize the area you are drawing, you can change from 'filled' to 'outline' mode as well as change the line color and width.***

You may have noticed your mouse cursor now looks like a square.

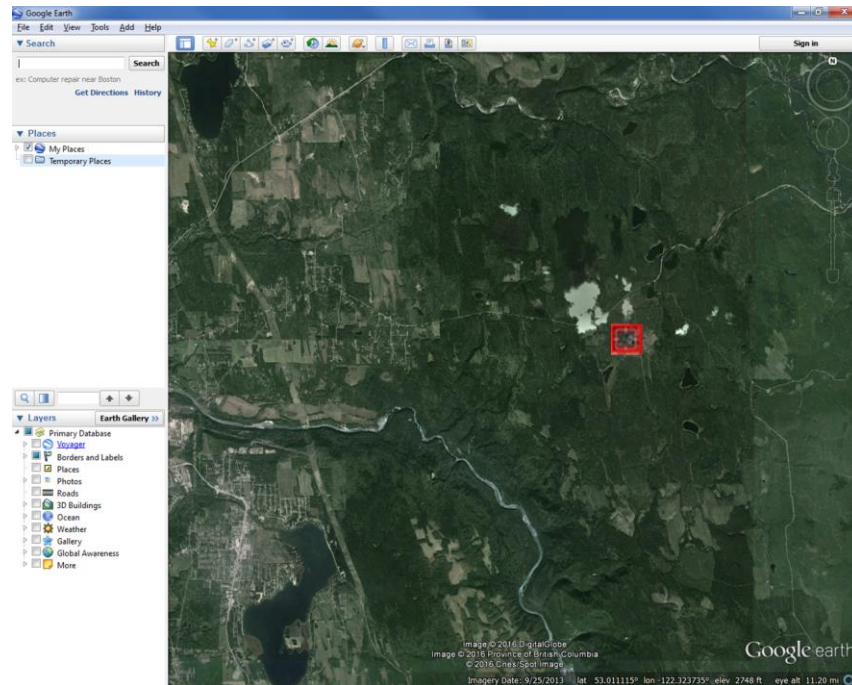


This means you are ready to start picking the points that will define the area you are interested in.

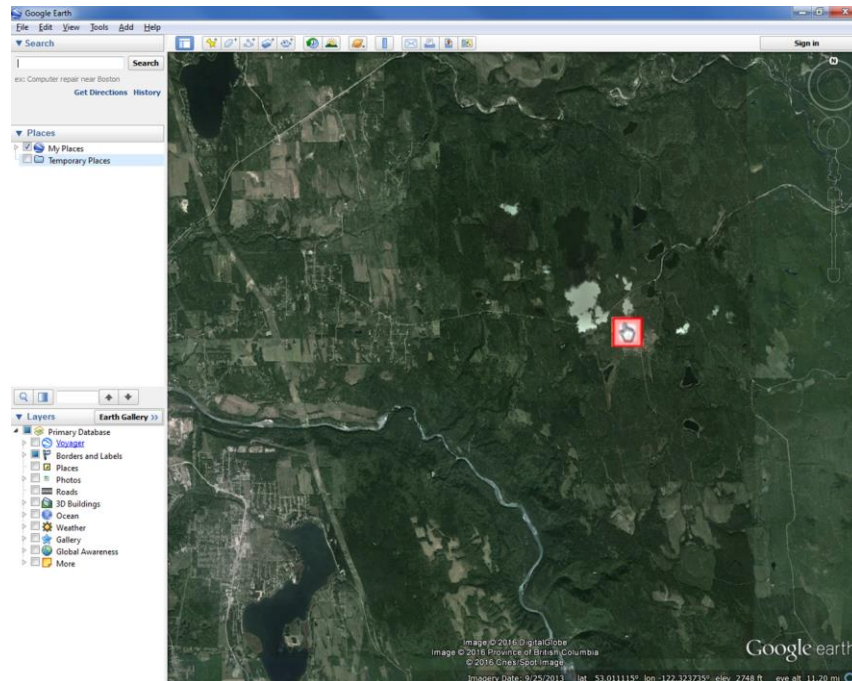
When defining your area, use the left button on your mouse to pick the points, pick points in a clockwise direction and avoid creating loops or overlaps. See the [FAQs](#) for points to watch for when drawing your area of interest.


Add Polygon Instructions

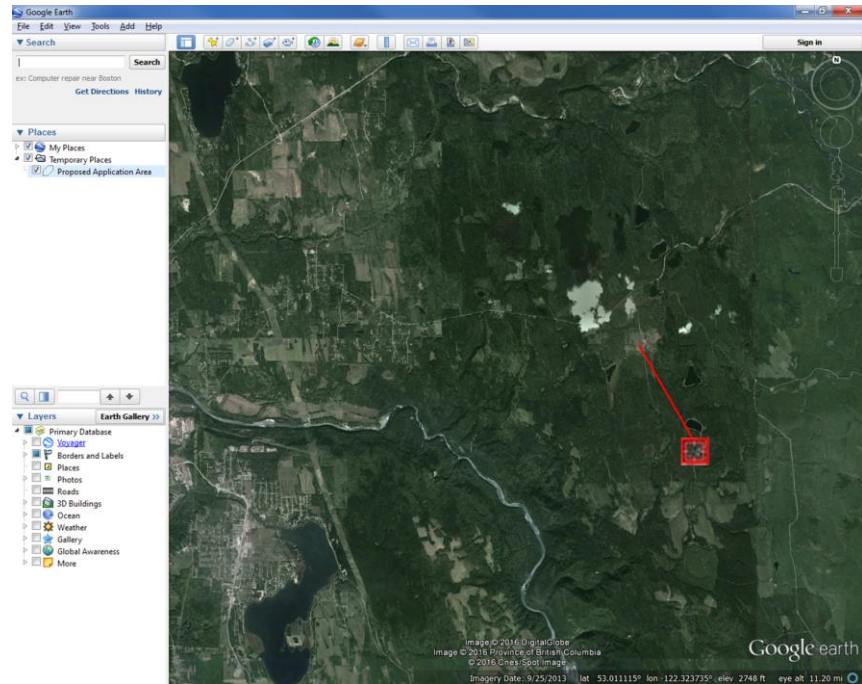
Pick the point on the map to place your first point and click the left mouse button.




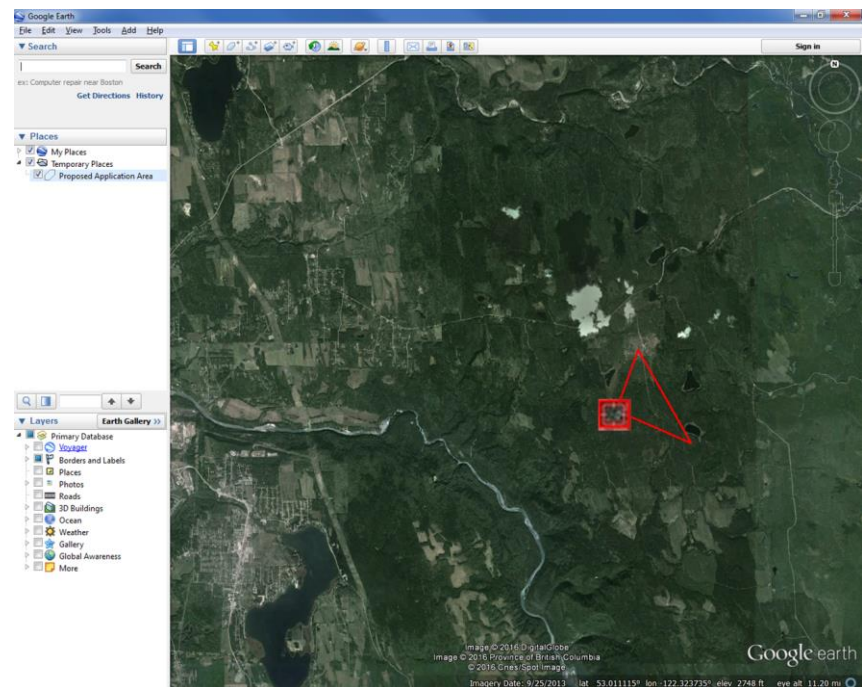
When a point is drawn on the map, a 'hand' icon will appear. This hand icon also appears any time your cursor hovers over a digitized point.



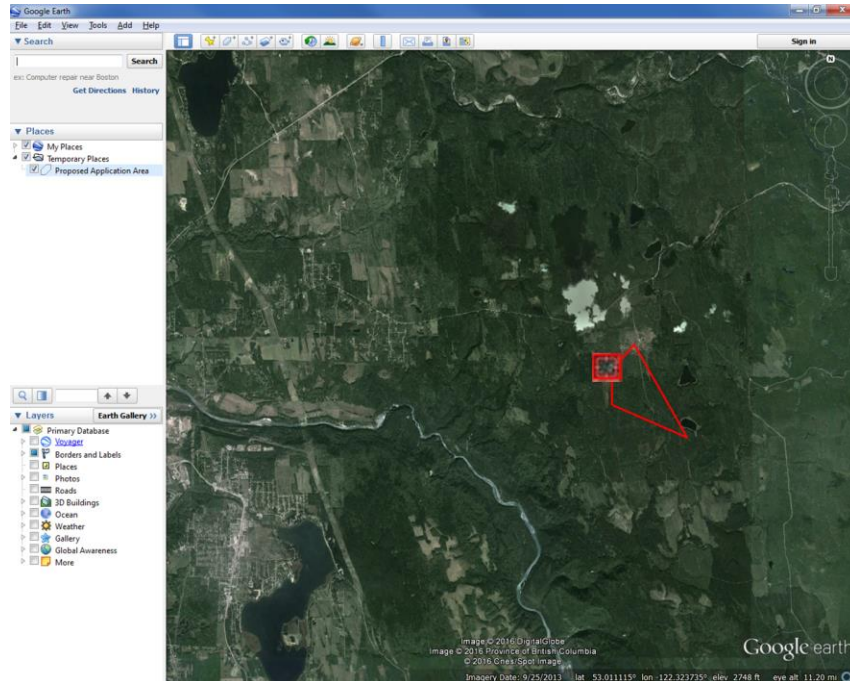
Place the square cursor  at your second point and click the left mouse button again.



Place the square cursor  at your third point and click the left mouse button. Do this for every point required to draw your area of interest.

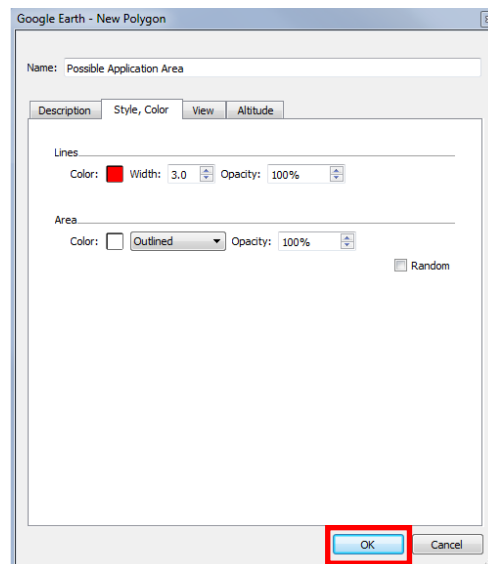


Remember to draw the area of interest in a clockwise direction.



When defining a shape, you can go back and 'undo' a previous point by clicking the right button on your mouse. You then reposition the square cursor and left click to set the point.

When you are finished defining the area, click on 'OK'.



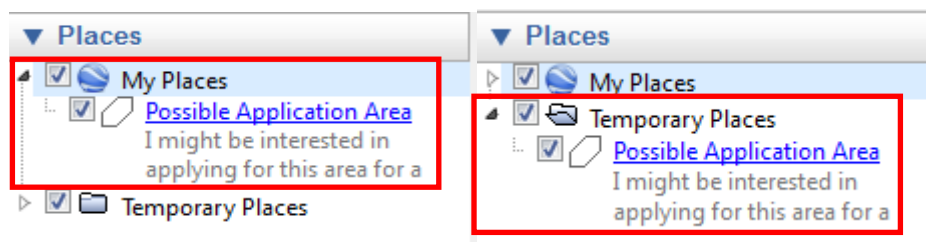
The points that you picked will form a "shape". A shape outlines and defines the area you are interested in. Your shape might look something like this example:



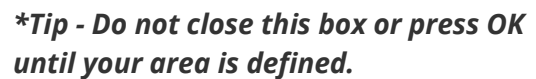
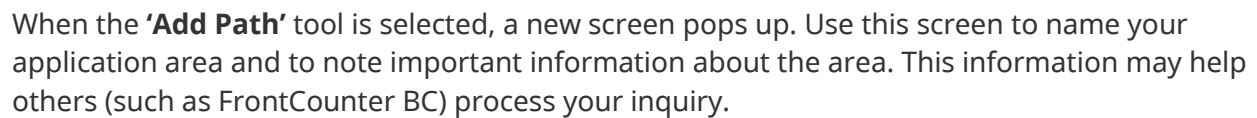
On the bottom of your screen, you'll notice some useful information about the area displayed on the screen. You can use these coordinates to find the location again, confirm the elevation or even see how far above the earth's surface you are viewing the land.



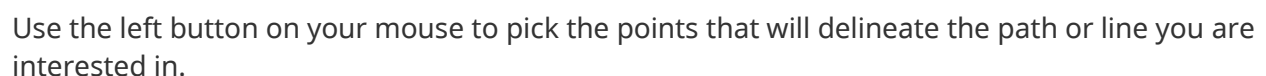
****Tip - If you have navigated away from your area of interest and want a quick way to return to your original location, double-click on the file name you created in either the 'My Places' or 'Temporary Places' section of the left navigation window.***



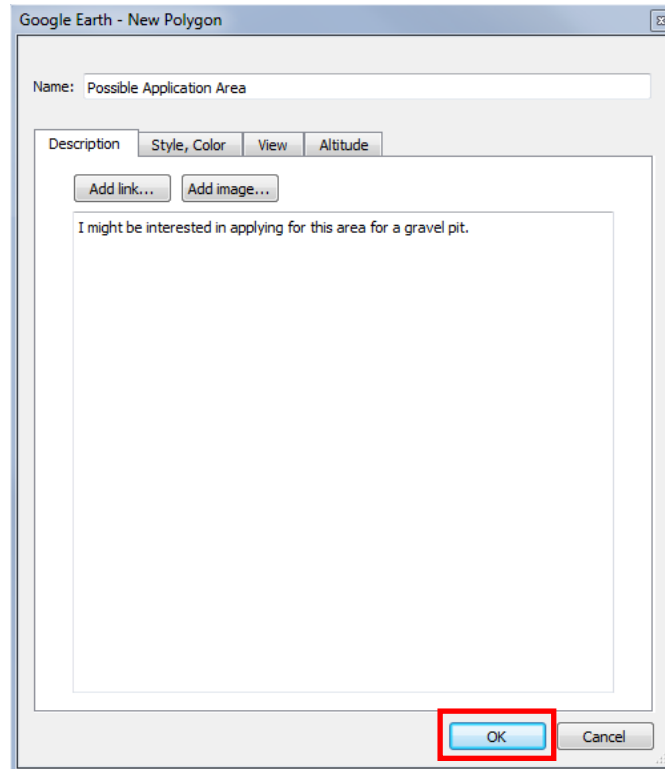
The Path tool is located on the main toolbar.



You may have noticed your mouse cursor now looks like a square.



When you are finished drawing the path, click on **'OK'**.



7c. Use the same steps outlined in 7b to create an area of interest using the **'Add Placemark'** (point) tool.

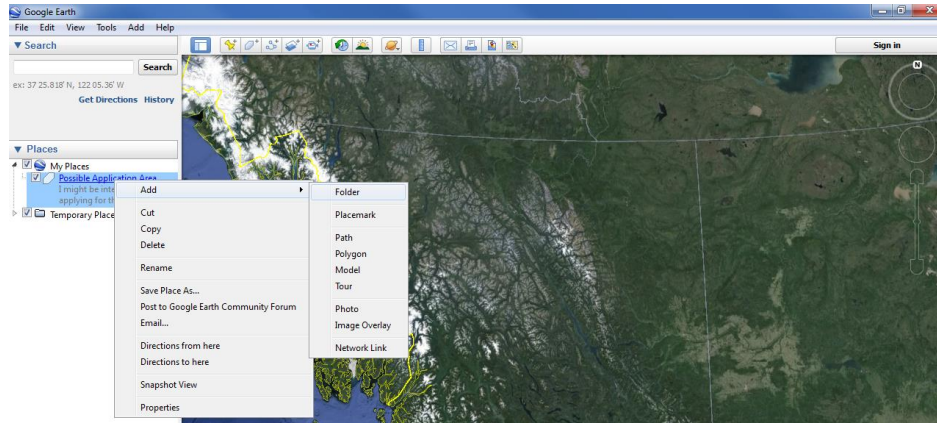


Step 8

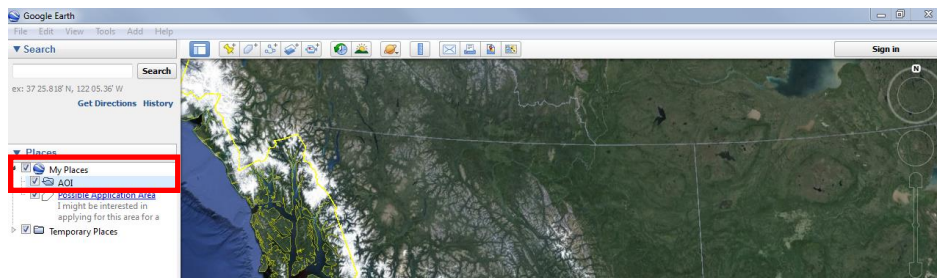
Defining Multiple Shapes in one geomark

To create a geomark that defines multiple shapes or polygons:

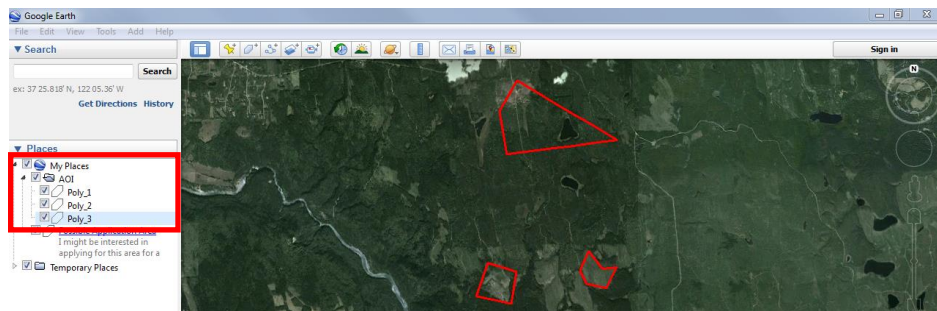
- i. Create a folder in your Google Earth session. Right click on 'Temporary Places' in the left-hand table of contents, click **'Add'** and then **'Folder'**. Name your folder appropriately.



- i. Click once on the newly created folder so it is highlighted and then create a polygon as per Step 4.



- i. Create as many polygons as required in that folder as per the above steps. Having multiple polygons in your newly created folder will look like the following.

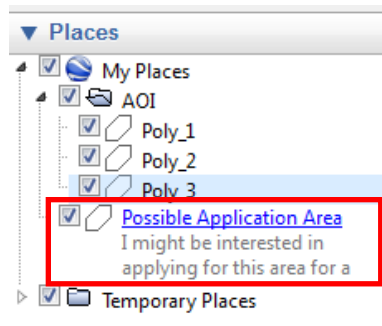


If you want to delete any of the areas you created, the next step of this tutorial will show you how to delete a shape.

Step 9

Deleting Shapes

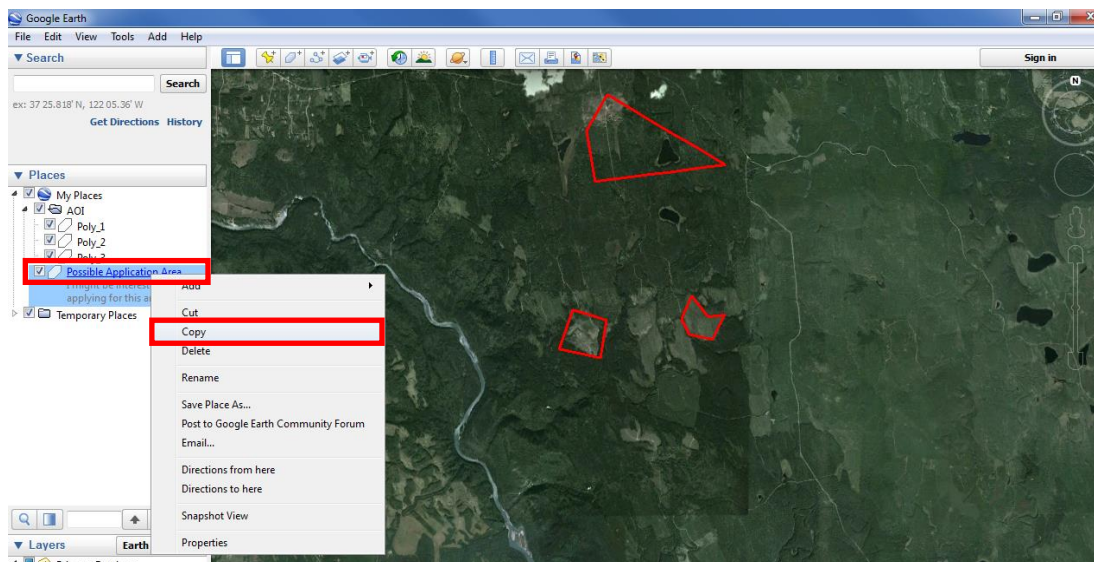
To delete your shape, click on the name of the shape you created. You will find the shape name in the "My Places" or "Temporary Places" section of the left navigation window.



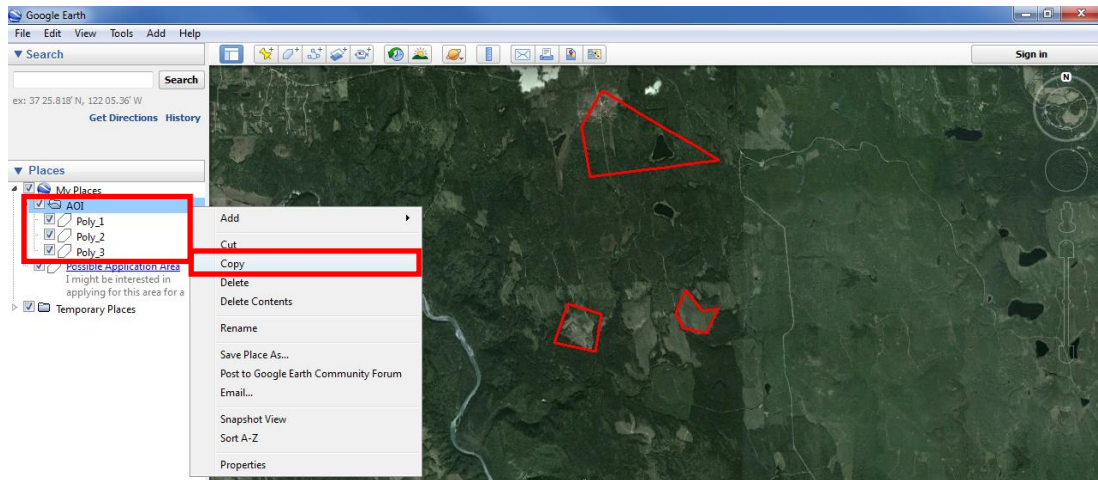
Once you've selected the shape name, click the right button of your mouse. From the list of options presented, choose **Delete**. The shape will be removed from your screen and the shape name will disappear. Use the **Polygon Tool** to outline the area again.

Step 10

Step 10: Once your area of interest is defined, your area of interest name will appear in the left-hand table of contents. Click on the name in the table of contents to highlight it and then click your right mouse button and select '**Copy**'.

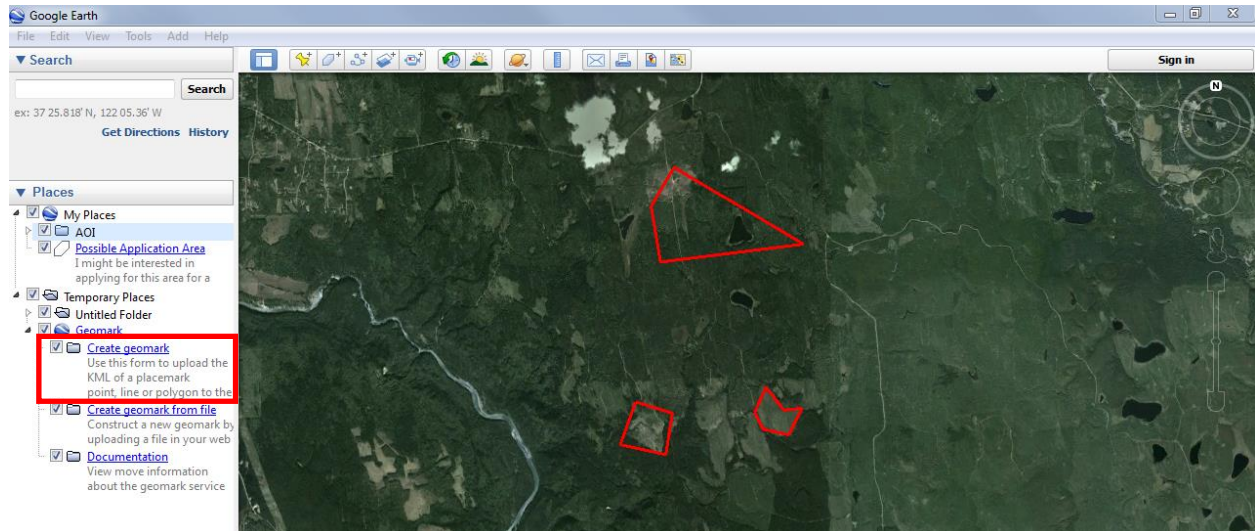


If you have created a new folder that contains multiple polygons, click once on the name of the folder to highlight it, and then click your right mouse button and select '**Copy**' to copy the entire folders' contents.



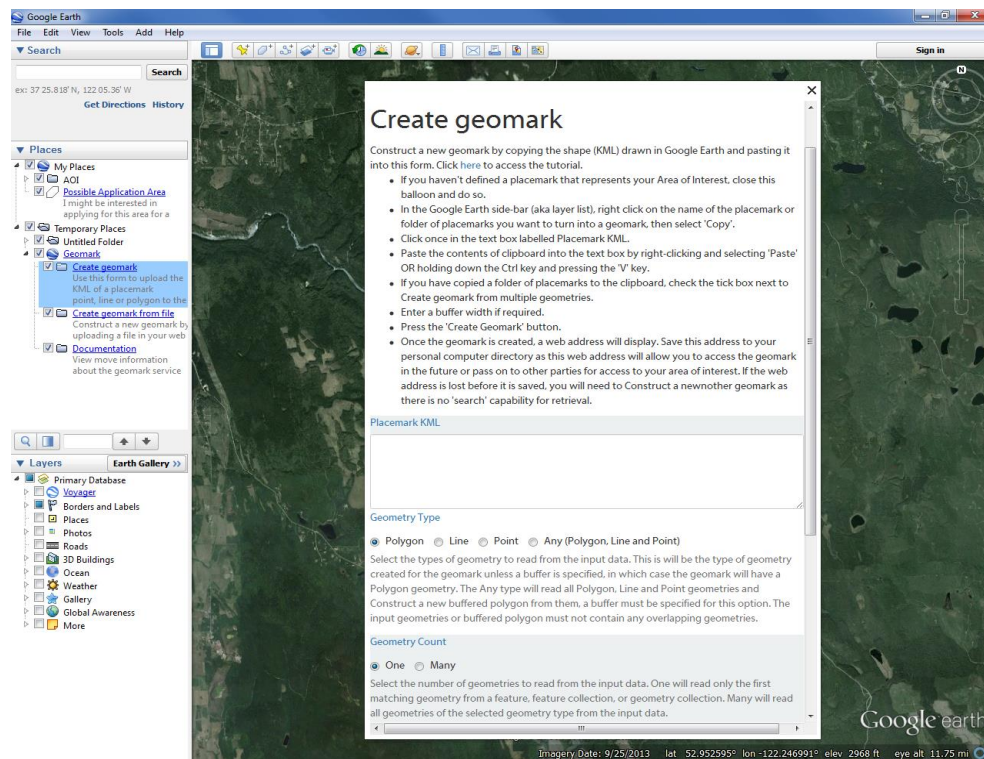
Step 11

Step 11: Click on the 'Create Geomark' link.



Step 12

Step 12: A form will pop up in a new window.



Step 13: Click once in the text box located on the form. When the cursor starts flashing, either right click the mouse and select **'Paste'** OR press **'Ctrl' + 'V'** together to paste the area you've created into the text area.

[illegible]

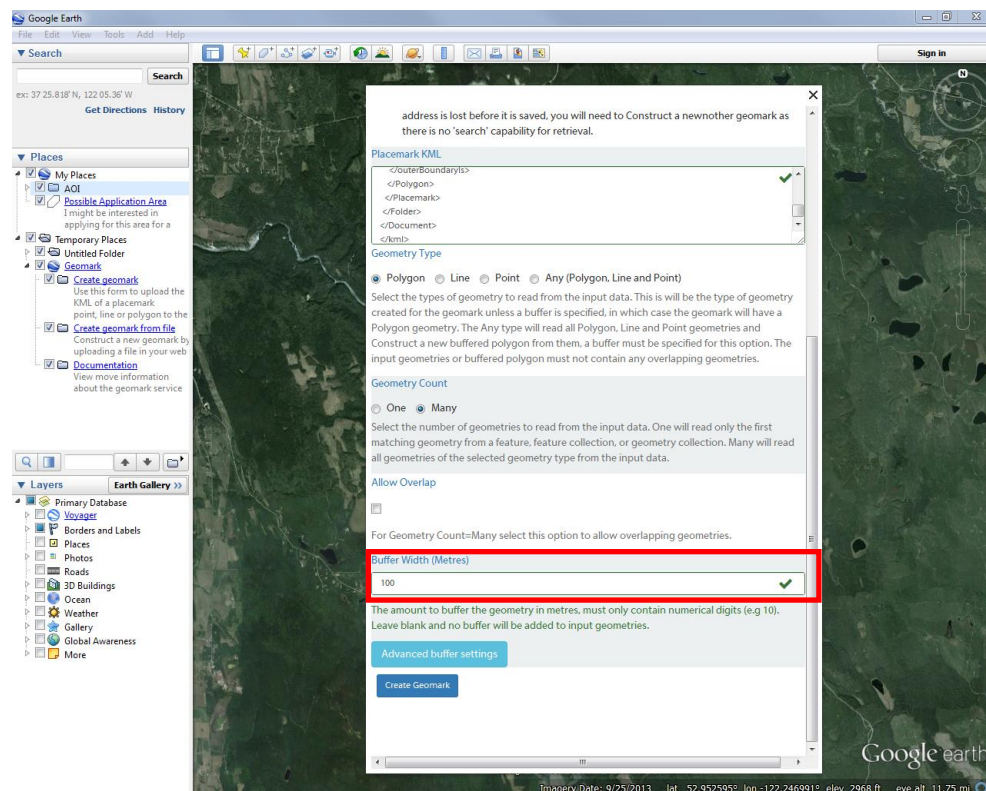
Buffering Shapes

A buffer is a zone around a map feature measured in the units of distance indicated. Example, a buffer width of 100m will result in total distance of 200m or 100m on each side of the line feature. More detailed information regarding buffering shapes can be found in the Geomark Service application.

Step 14

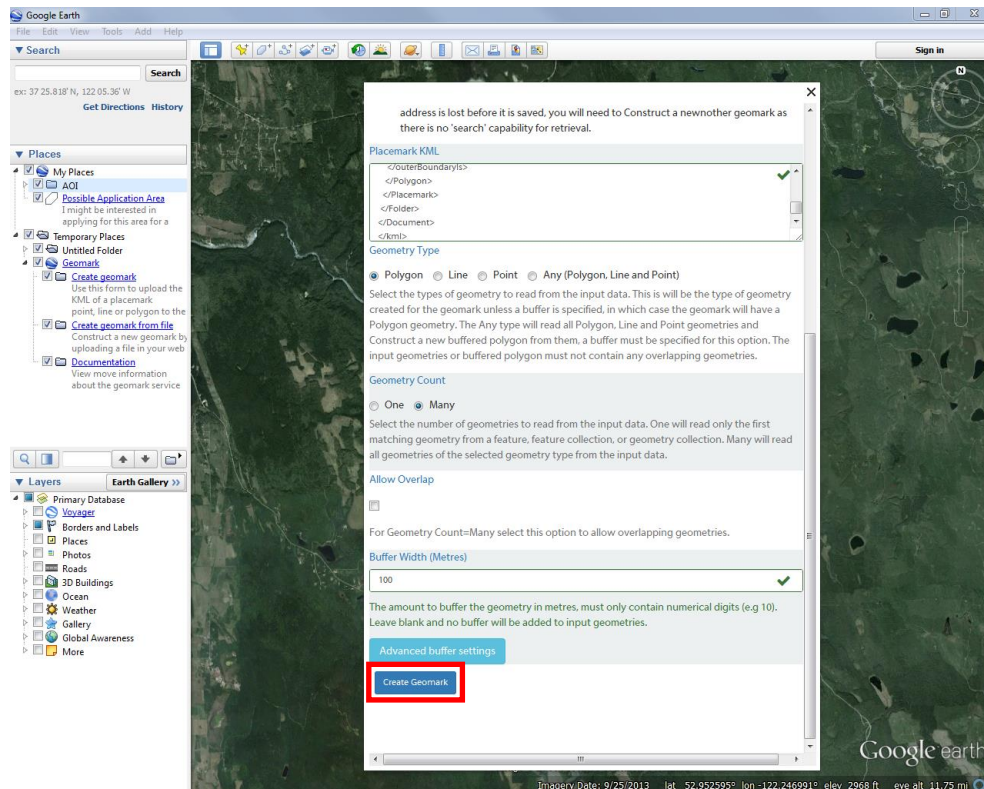
Step 14: To buffer the polygon, line or point created above, enter the desired buffered distance in metres in the text box provided.

NOTE: A line or point cannot be converted to a geomark unless a buffer width is entered. All resulting geomarks will NOT store or show the original point, line or polygon.



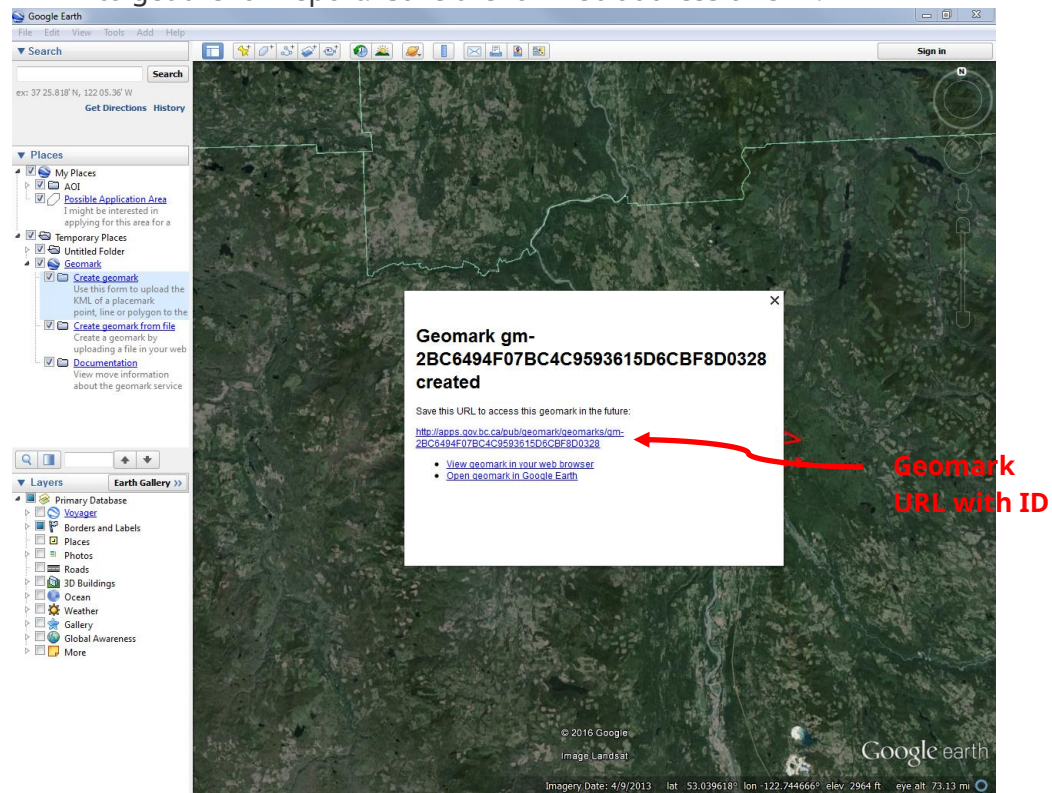
Step 15

Step 15: Click the 'Create Geomark' button.



Step 16

Step 16: Once the geomark is created, a geomark ID and link will be displayed. Click the geomark ID link to get the full report. Save the full web address or URL.



Step 17

Step 17: Save the full web address or URL, which includes the geomark ID, to your personal directory as this web address will allow you to access the geomark in the future or pass on to other parties for access to your area of interest. If the web address is lost before it is saved, you will need to create another geomark as there is no 'search' capability for retrieval.

The screenshot shows the 'Geomark Info' page in a web browser. The browser's address bar contains the URL: <https://apps.gov.bc.ca/pub/geomark/geomarks/gm-542F450F78DF49E4849410BCEC27CC6E/info>. A red box highlights this URL, and a red arrow points from the text 'Geomark URL with ID' to it. The page header includes the 'BRITISH COLUMBIA' logo and the title 'Geomark'. Below the header, there are tabs for 'Info', 'Download', and 'Map'. The 'Info' tab is active, showing a 'Click to Copy Geomark URL' button and a message: 'then save the link to access this geomark in the future.' A red arrow points from the text 'Geomark Link' to this button. Below this, there is a list of bullet points explaining how to use and share geomarks. The main content area displays various details about the geomark, including its ID, creation date, expiry date, bounding box, centroid, geometry type, geometry count, vertex count, length, area, and minimum clearance. A red bracket on the left side of the page groups these details under the label 'Geomark Report'. At the bottom of the page, there are three green buttons: 'Valid', 'Simple', and 'Robust'. The footer contains links for 'About gov.bc.ca', 'Disclaimer', 'Privacy', 'Accessibility', 'Copyright', and 'Contact Us', along with the version number '6.0.0'.

Geomark URL with ID

Geomark Link

Geomark Report

Click to Copy Geomark URL then save the link to access this geomark in the future.

- You can access this geomark in the [formats and coordinate systems](#) of your choice.
- This geomark can be shared with anyone on the web by simply sending them the saved link.
- The list of all geomarks is kept secret. Sharing is up to you.
- Geomarks are tamper-proof. They can't be changed once created.

ID: gm-abcdeghijklmnopqrstuvwxyz0000bc

Creation Date: 2011-04-11

Expiry Date: None

Bounding Box (W,S,E,N): -144.664931,47.527035,-112.989186,60.724742

Centroid (lat,lon): 54.745332,-128.104468

Geometry Type: Polygon

Geometry Count: 1

Vertex Count: 13

Length: 5 958.504 km

Area: 187 864 202 ha

Minimum Clearance: 94.994 km

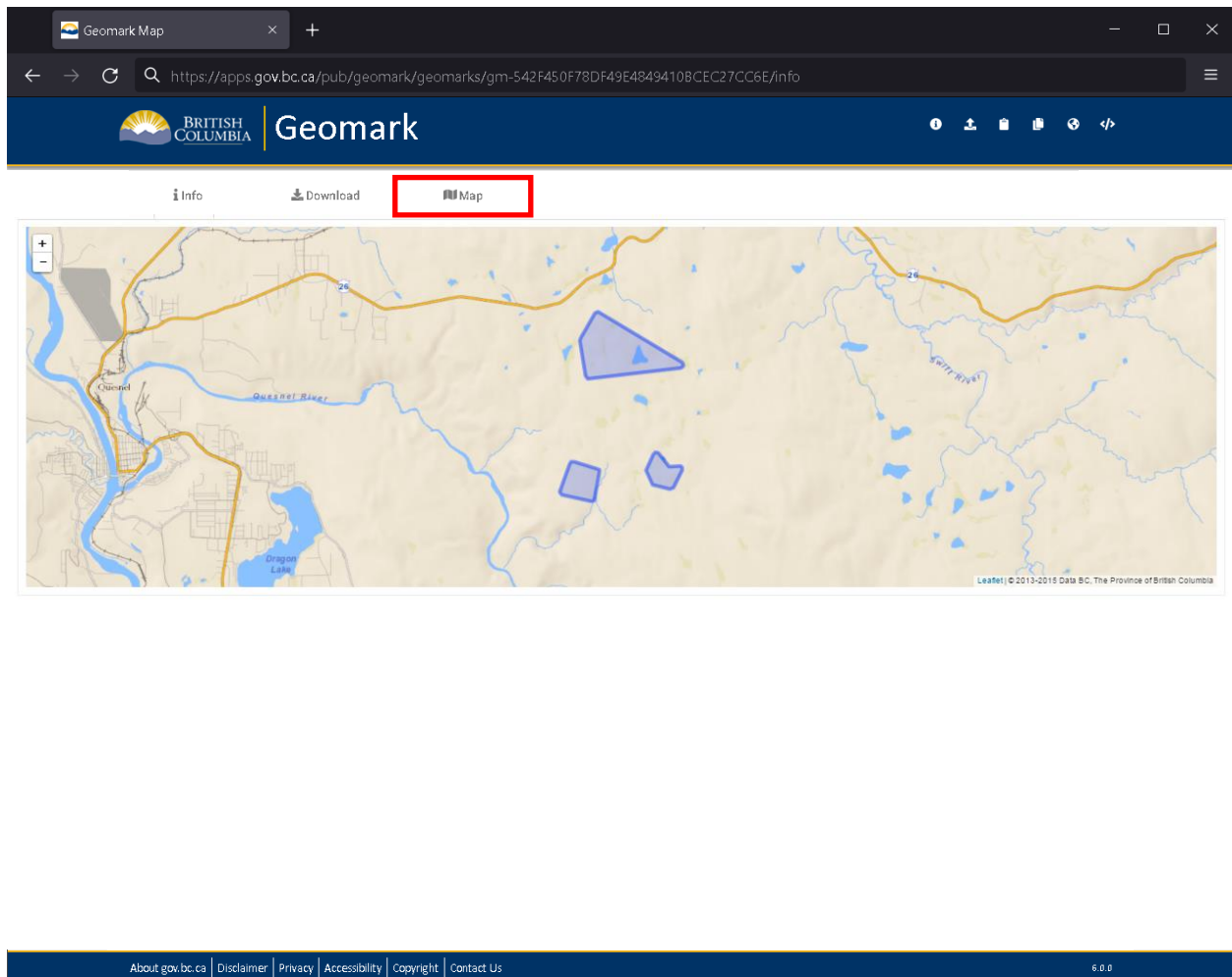
Valid Simple Robust

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6.0.0

Step 18

Step 18: You can view the file you converted to a geomark using the Map tab.



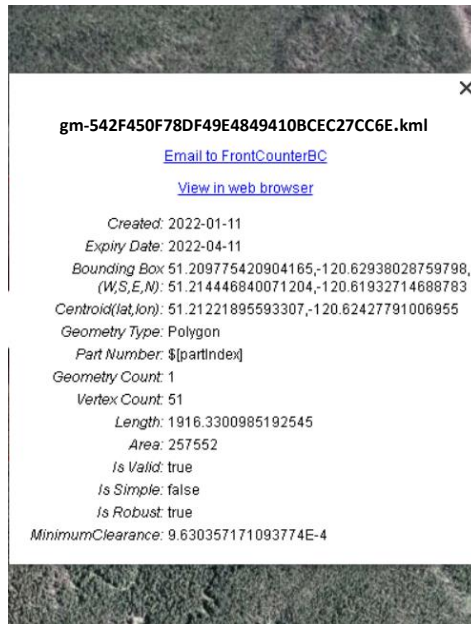
Step 19

Step 19: Or you can download the geomark into a file format and projection that is more convenient for viewing and / or analysis.

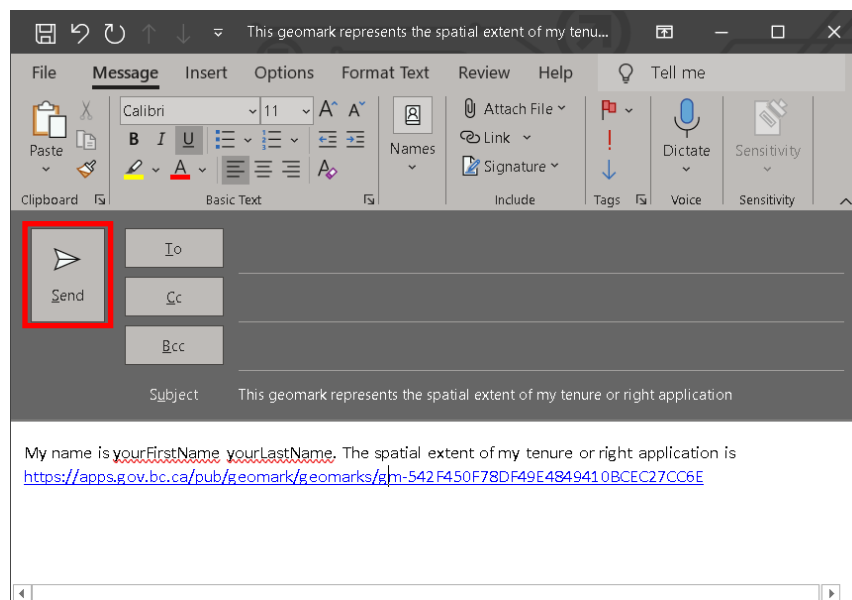
The screenshot shows a web browser window with the address bar displaying the URL: <https://apps.gov.bc.ca/pub/geomark/geomarks/gm-542F450F78DF49E48494108CEC27CC6E/download>. The page header features the British Columbia logo and the word "Geomark". Below the header, there are three tabs: "Info", "Download" (which is highlighted with a red rectangle), and "Map". The "Download" tab contains three dropdown menus: "FileFormat *" with the selected value "Google Earth (kml)", "Coordinate system *" with the selected value "4326 - WGS 84", and "Download Geometry Type *" with the selected value "Polygon". Each dropdown menu has a small question mark icon to its right. Below these menus is a blue button labeled "Download" with a download icon. The footer of the page contains links for "About gov.bc.ca", "Disclaimer", "Privacy", "Accessibility", "Copyright", and "Contact Us", along with the version number "6.0.0".

Step 20

Step 20: To send an email to FrontCounter BC about your proposed application area download the geomark (Download tab) into KML format. Click on the area of interest in Google Earth and view the information window.



Click on the link labelled as 'Email to FrontCounterBC' and you will be presented with a pre-formatted email template.



Update the email body with information specific to your application and click 'Send'.