

1) Introduction

The Lightning Ridge web mapping application allows simple searches, reports and maps to be created over the opal mining areas of Lightning Ridge. The information shown on this site is updated daily. The following datasets are available for display:

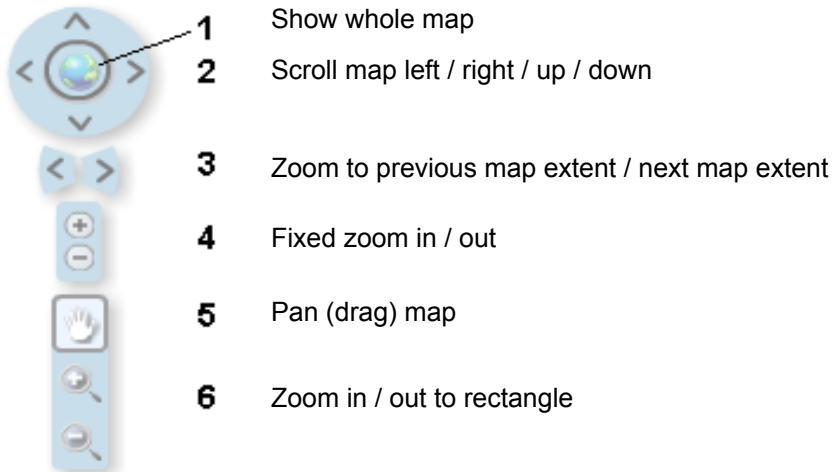
2) Map Layers

Layer	Details
<ul style="list-style-type: none">Opal FieldsSurvey PegsLocalities	<p>Locations of the better known opal fields</p> <p>Lists field pegs used to locate and mark out claim applications</p> <p>Shows various types of point features, such as airports, buildings, dams, waterholes, etc.</p>
<ul style="list-style-type: none">Infrastructure	<p>Built features in the Lightning Ridge area, such as roads and tracks, fences, electrical lines, etc.</p>
Claims	
<ul style="list-style-type: none">Current ClaimsHistorical claimsWestern Lands LeasesMining Leases	<p>Current Claims</p> <p>Expired and cancelled claims</p> <p>Residential claims that have been converted to western lands leases</p> <p>Mining titles (excluding mineral claims). These are mostly Leases for Mining Purposes, and were granted for purposes such as mullock dumps, puddling leases, etc.</p>
Areas Excluded from Mining	
<ul style="list-style-type: none">Gazetted ReservesMining Restrictions	<p>Areas which have been excluded from mining by notice posted in the NSW Government Gazette.</p> <p>Restrictions placed on mining by the department. These include areas considered to be unsafe for mining, policy reserves, mullock dumps, agricultural land, etc.</p>
Administrative Boundaries	
<ul style="list-style-type: none">Preserved FieldsOpal Prospecting AreasOpal Prospecting BlocksCadastral ParcelsProperties	<p>Areas of Lightning Ridge of historical mining significance. Rehabilitation requirements are suspended in some of these areas.</p> <p>The Lightning Ridge Mineral Claims District is currently divided into four Opal Prospecting Areas (OPAs).</p> <p>OPAs are subdivided into Opal Prospecting Blocks (OPBs). An Opal prospecting licence is issued over an entire block.</p> <p>Individual parcels of land can be displayed. These are identified by Deposited Plan and Lot Number.</p> <p>Properties which fall within the Lightning Ridge Mineral Claims District. Reports can be produced to list claims which are currently on these properties.</p>
Aerial Photography	<p>Aerial photography was flown by Land and Property Information NSW over the Lightning Ridge area in 2008.</p>

3) Functions

There are a number of tools available from within this application. They can be used to search for features on the map and display information about these features. Simple maps can be marked up and printed.

Navigation toolbar – allows the user to adjust the extent and the position of the area being viewed.



Legend – turn Legend on / off



Bookmarks – Pick a pre-determined part of the map to zoom to



Print – Click to print a pdf version of the map displayed on screen



Export Map – takes a screen shot of your map in .png format



Draw and Measure – Can plot GPS points, measure distances, calculate area.



Search – Search and zoom to a claim, property, reference marks, WLL and OPB. Will zoom straight to layer



Property Search – Lists current claims within a selected property.

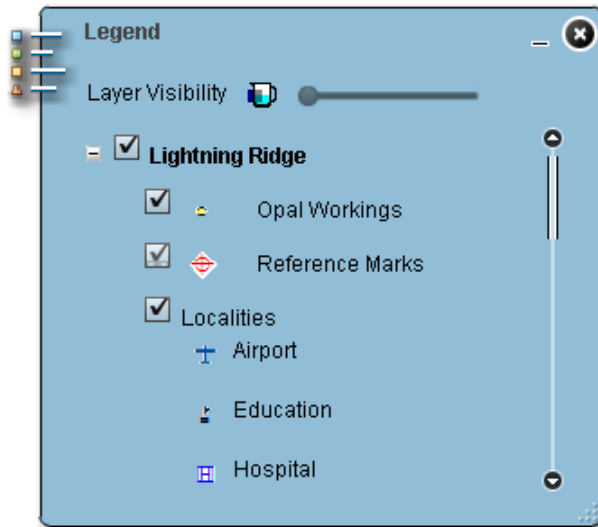


Identify – lists details of any visible item clicked on.

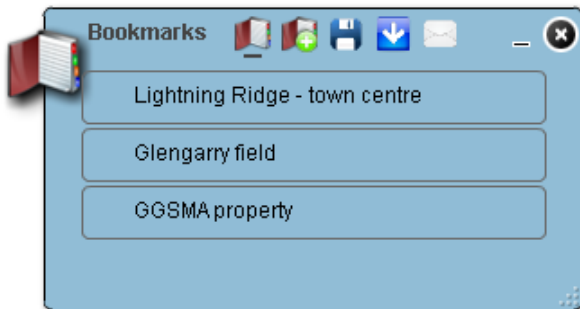
More...

More – A tool that allows you to turn off individual layers and the background imagery.

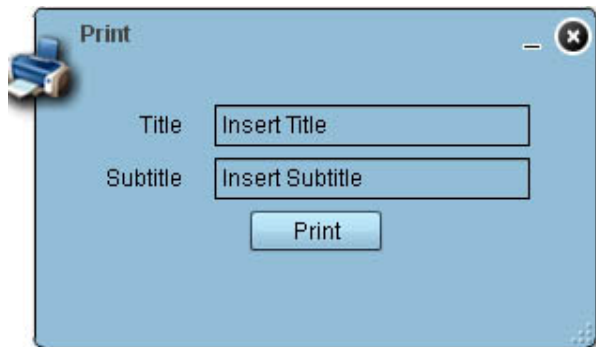
Legend – turn Legend on / off – Shows all of the layers on the map. You have options to turn off individual or whole groups of layers within this menu.



Bookmark – A list of pre-determined areas that can be zoomed to at any time



Print – A Simple tool to print out the whole map shown on the screen. An option to give your map a title and subtitle are included and will be shown at the top of your map.



Export Map – Creates a snapshot of your current screen and saves the current map view to your computer as an image.



Draw and Measure – This set of tools is used to draw points and lines, measure distances and calculate areas on the map.

There are four sets of tools within the draw and measure menu.

Points – draw a point. The x and y s

Measure – draw a straight or freehand line. Length of the line will be displayed on completion.

Calculate Area – draw rectangle, circle, ellipse, and polygon. The area of the drawn shape will be displayed on completion.

Add Text – add annotation to the map

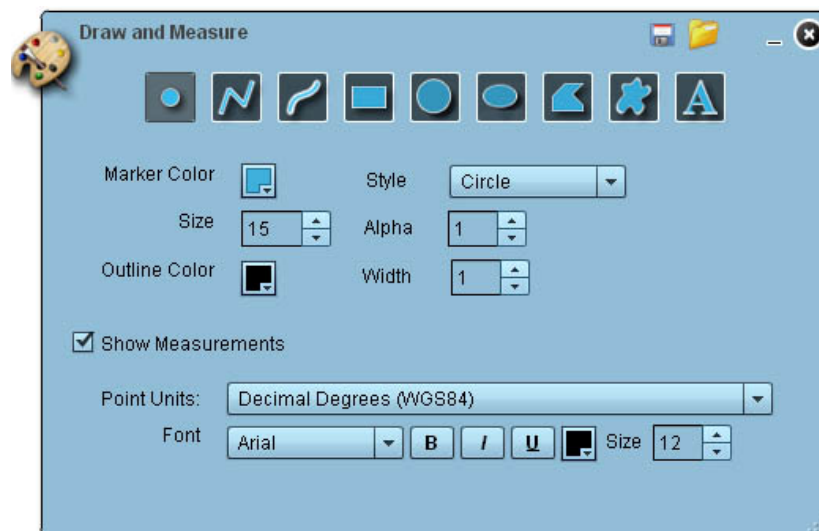
Draw points – This tool is enables you to place a point on the map and it will display the co-ordinates of the point. There are numerous labelling and font choices.

There are 3 different Point Units available for selection. The list below shows the available point systems and an example of the format.

Decimal Degrees (WGSS84) – e.g. 147.98, -29.42

DMS (WGS84) e.g. 147° 58' 46.1622" , 29 ° 27' 7.9141"

Metres (Lamberts) 9,395,301.22 , 4,920,111.54

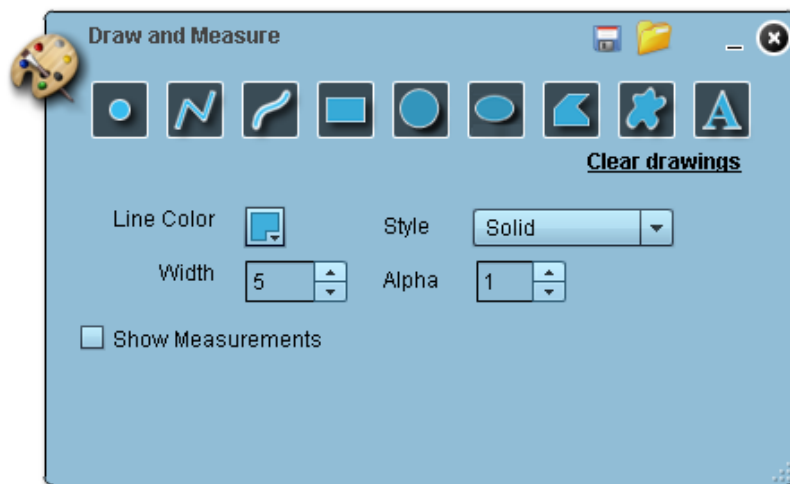


An example of Decimal Degrees point placed at the end of the Lightning Ridge Airport Runway



Measure – Draw Line, Draw Freehand Line

The toolbar for draw line:



The Measure tools are used to calculate distance between two points on the map.

To measure a distance, choose one of draw tools (Draw Line or Draw Freehand Line), and tick the 'Show measurements' menu option

If using the Draw Line tool, click your mouse at your start point and double click the mouse on your end point

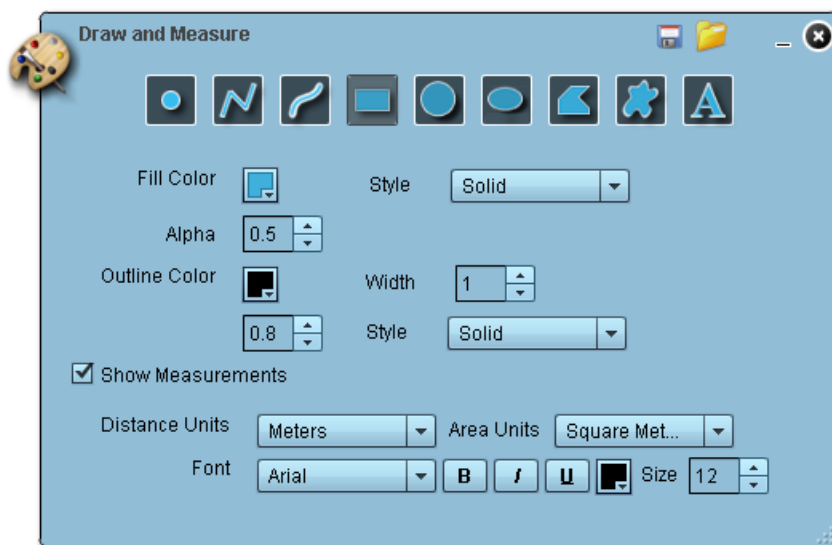
If using the Draw Freehand Line tool, move the mouse to the start point of the line, then click and hold the mouse button while dragging your mouse to the desired end point.

The distance can be calculated in metres, kilometres, feet or miles. Use the 'Distance Units' list box to make your selection.

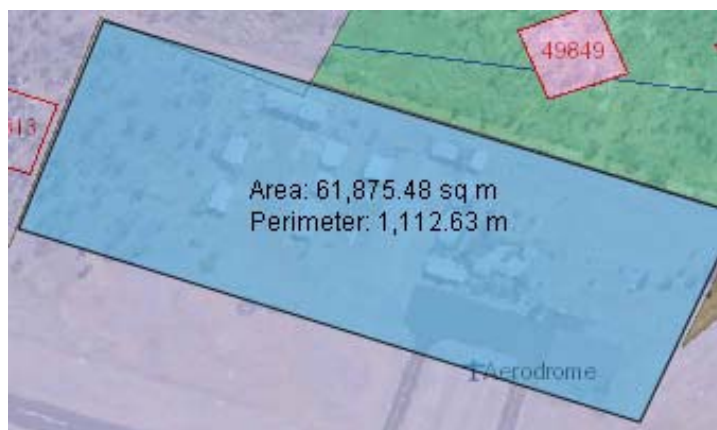
An example of a Measurement shown on the map.



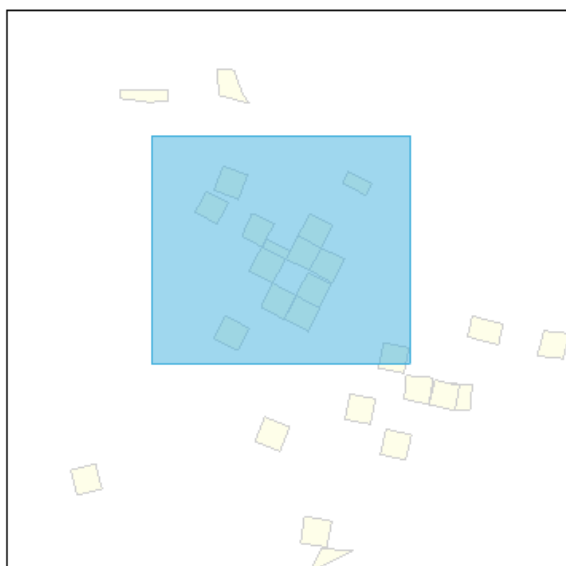
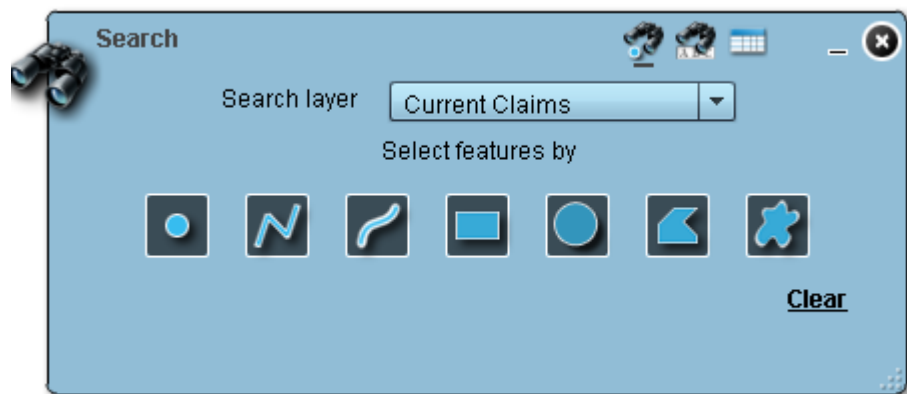
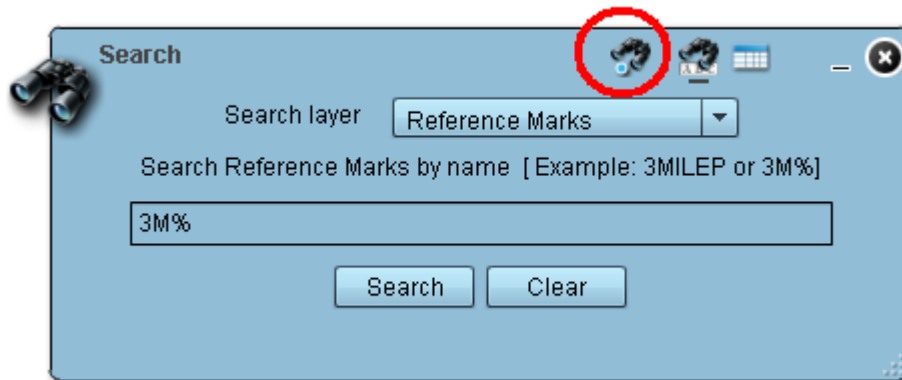
Calculate Area and Perimeter using Draw a Rectangle, Circle, Ellipse, Polygon or Freehand Polygon tools



An example of a 'Draw Polygon' over Lightning Ridge Airport.



Search – The search tool is used to find and zoom to a certain item on the map. Features can be selected by drawing. Clicking the button shown below gives the option



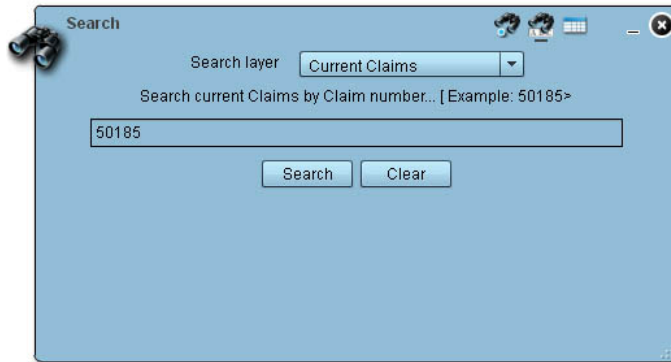
A square search area was drawn, and all current claims within that square were listed.

The following layers can be searched:

- Current Claims

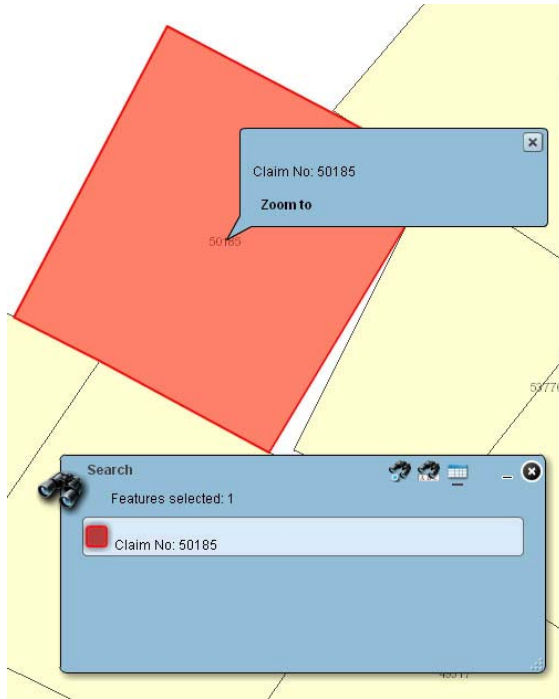
- Historic Claims
- Properties
- Reference Marks
- Western Lands Leases
- Opal Prospecting Blocks

Then, input a claim number (or property name, reference mark etc as required).



A “Features found” box will appear when the search is complete. Clicking a feature shown in the list will zoom the map to its location.





When searching on a text string (for example, a survey peg name) wild card characters can be used.

Property Search – the following menu will be displayed when the ‘Search Property’ option is selected. Entering a property name and clicking the ‘Get Details’ button will return a list of claim holders and current claims on the selected property.

