

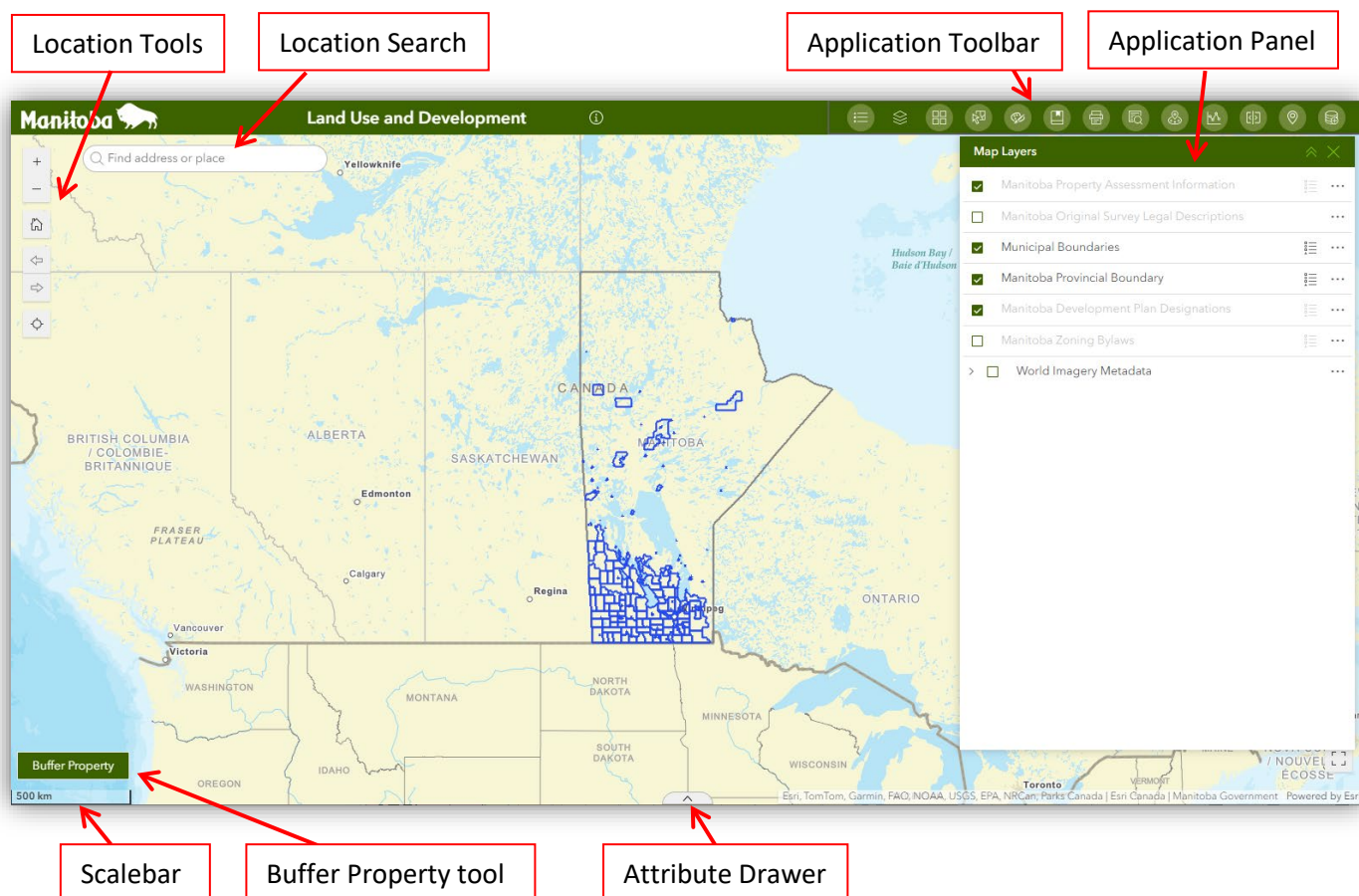
MANITOBA LAND USE AND DEVELOPMENT WEB APPLICATION:

How-to guide and help document

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Layout & View Overview



Location Tools – Used to change the scale/location of the map view. See [Location Tools](#) Section.

Location Search – Search for location by landmark or address.

Application Toolbar – Collection of Analysis and Mapping tools. See [Tools](#) Section.

Application Panel – Can be hidden or closed from view. Shows Active Tool.

Scalebar – Metric scalebar that displays the current views scale.

Buffer Property tool – To find properties within a fixed distance.

Attribute Drawer – Click to hide or expose Attributes of all Map Layers.

Layers

Municipal Relations Data Layers

Development Plan Designations - This dataset is comprised of boundary geometry representing the development plan designations for all the development plan bylaws (as defined in The Planning Act) in force and effect in Manitoba.

Metadata:

<https://manitoba.maps.arcgis.com/home/item.html?id=6fe6107e957d4a9e98d11f71fd13089a>

Zoning Bylaws - This dataset is comprised of boundary geometry representing the zones in the zoning bylaws (as defined in The Planning Act) in force and effect within the Province of Manitoba.

Metadata:

<https://manitoba.maps.arcgis.com/home/item.html?id=86e5bc6fd550410381a23dba8149d87e>

Manitoba Property Assessment Information - Boundary geometry for all the assessed property within the Province of Manitoba. Please visit the Manitoba Property Assessment website for more information www.gov.mb.ca/assessment.

Metadata:

<https://manitoba.maps.arcgis.com/home/item.html?id=8106acf39b124422a5f03a5c4e55d269>

Manitoba Municipal Boundaries - Boundary geometry for all the incorporated municipalities within the Province of Manitoba.

The boundaries in this dataset represent the descriptions set forth in the Municipal Status and Boundaries Regulation (567/88R) and subsequent amendments.

Metadata:

<https://manitoba.maps.arcgis.com/home/item.html?id=8b64285c3bf6445a8d0d8ea4a1c43849>

Manitoba Original Survey Legal Descriptions - Feature layer depicting the centre of quarter sections, parish lots and others in Manitoba. The purpose of this layer is to provide search criteria for Manitoba legal descriptions.

Metadata:

<https://manitoba.maps.arcgis.com/home/item.html?id=11fa11f9015b45438d6493dcb3d8071c>

Disclaimer:

For data delivered on line or by physical media by the Manitoba government:

Although extensive effort has been made to produce error free and complete data, all geographic information has limitations due to the scale, resolution, date and interpretation of the original source materials.

These data may be subject to periodic change without prior notification.

No Warranty: These data are provided as is, without any warranty, including any guarantee as to their performance, merchantability, or fitness for any particular purpose.

Liability: The entire risk as to the results of the use of these data is assumed by the user.

The Manitoba government is not responsible for any interpretation or conclusions based on these data made by those who acquire or use it.

The Manitoba government shall not be liable for any direct, indirect, special, incidental, compensatory or consequential damages or third party claims resulting from the use of these data, even if the Manitoba government has been advised of the possibility of such potential loss or damage.

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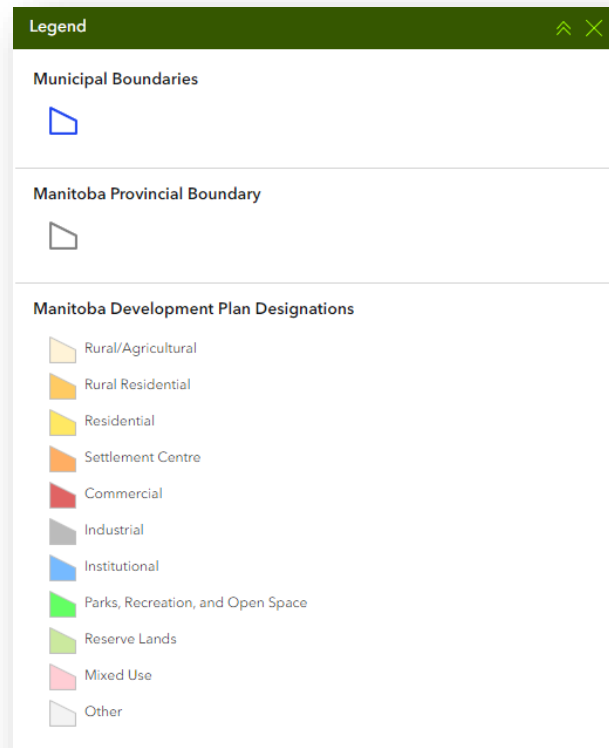
Applications and Tools

Legend



The Legend button displays labels and symbols for layers in the map. It is set to automatically update when the visibility of a layer or sublayer changes. When no operational layers are rendered in the map, the Legend tool is blank.

Basemaps are not shown in the Legend. The order in which layers appear in the Legend corresponds to the layer order in the map.



Map Layers



The Map Layers tool provides a list of operational layers and their symbols and allows you to turn individual layers on and off. Each layer in the list has a check box that allows you to easily control its visibility.

The order in which layers appear in this tool corresponds to the layer order in the map. Click the handle to reorder the layers.

Some layers are scale dependent, meaning they won't show until you zoom in closer. This is to reduce load time and clutter on the map. These layers will show up with their name in grey font until the map is zoomed in further.

Click the check mark to turn layers on or off

Scale dependent layers are grey. Zoom the map frame in further to view this layer

Handle to reorder the layers

Click the slide drawer button to view the layer symbology

Click to see the Layer Properties menu

Layer Properties

Each layer has a properties menu that can be opened by clicking the three dots to the right of the layer name. Anything applied here will be temporary and revert back to the defaults when the page is refreshed.

Hide/Show labels – Activates pre-defined labels for each layer. Most of the layer labels are scale-dependent, so they will show once you've zoomed in enough. They will hide when zoomed out.

Transparency – Increase or decrease the transparency of the symbols.

Details – Opens up the metadata for the layer in a new tab.

Set filter – Set a custom filter for the layer using all the available attribute fields.

Statistics – Generate statistics on numerical attribute fields.

Set location – Open the Planning Analysis tool based upon all features or all filtered features within the layer.

Add to table – Adds the layers tabular data to the attribute drawer at the bottom of the page.

Export – Export/download the layers tabular data.

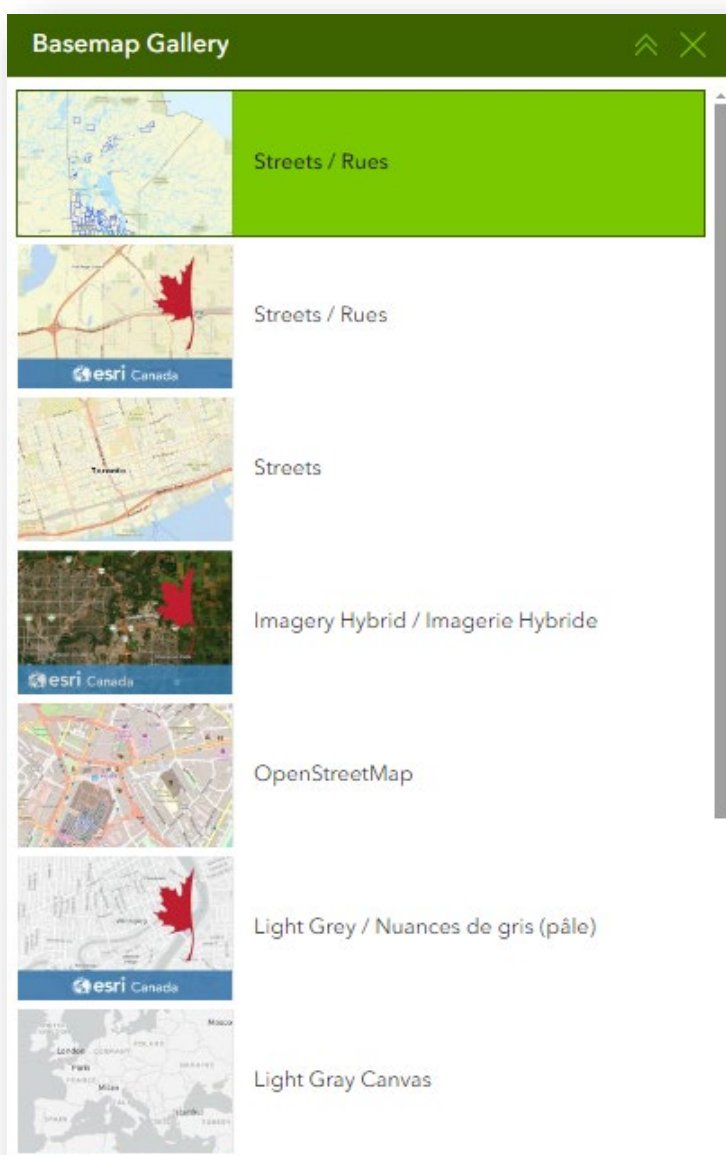
Basemap Gallery



The default base map in this app is the **Streets** map. To change the view, click on the icon for the Basemap Gallery.

Select the basemap you would like to view. There are several to select depending on your needs: topographic, imagery, OpenStreetMap, canvas and more. Basemaps with a red maple leaf are curated by Esri Canada.

Note that if you do not have a good Internet connection, some of these features could slow down your experience of the application (the canvas basemaps require the least bandwidth to load).

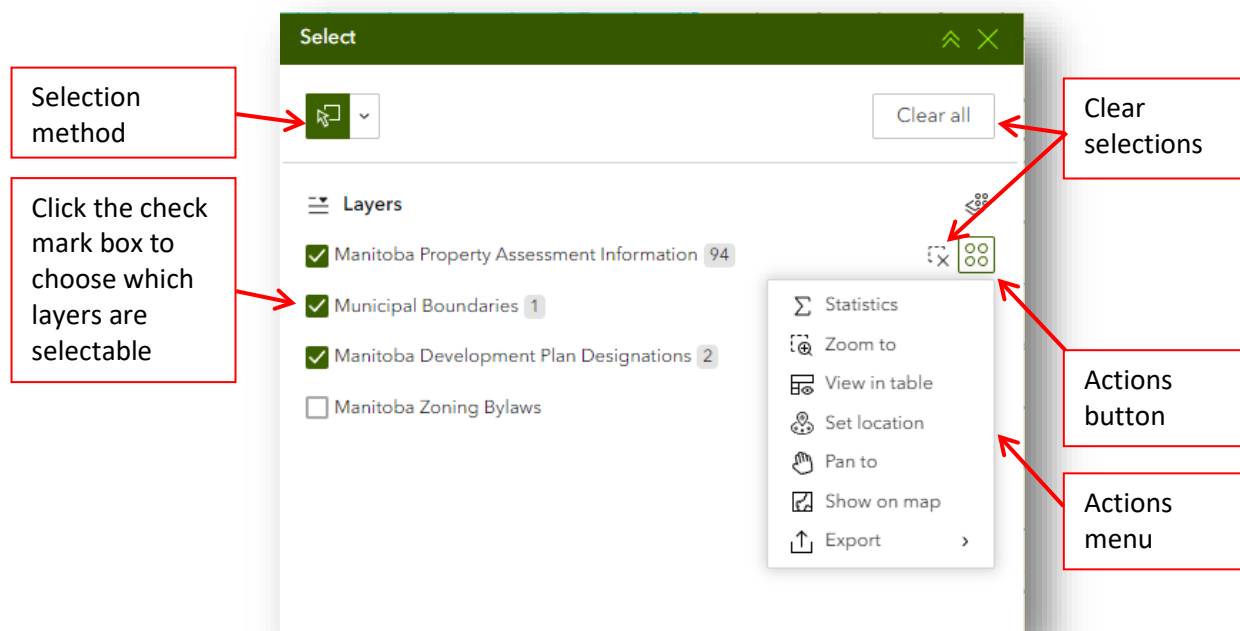


Select



The Select tool enables you to interactively select features on the map and take actions on the selected features.

Selection method – Highlighted green means that you are in selection mode, and you can use your cursor to select features. Click the drop-down to choose the interaction method.



Actions

Statistics – Generate statistics on numerical attribute fields based on selected features.

Zoom to – Zoom the map frame to the selected features.

View in table – View the attributes of the selected features in a table.

Set location – Use the selected features in the Planning Analysis tool.

Pan to – Pan the map frame to the selected features. This does not change the scale.

Show on map – Zoom the map frame to the selected features.

Export – Export/download the selected feature's tabular data.

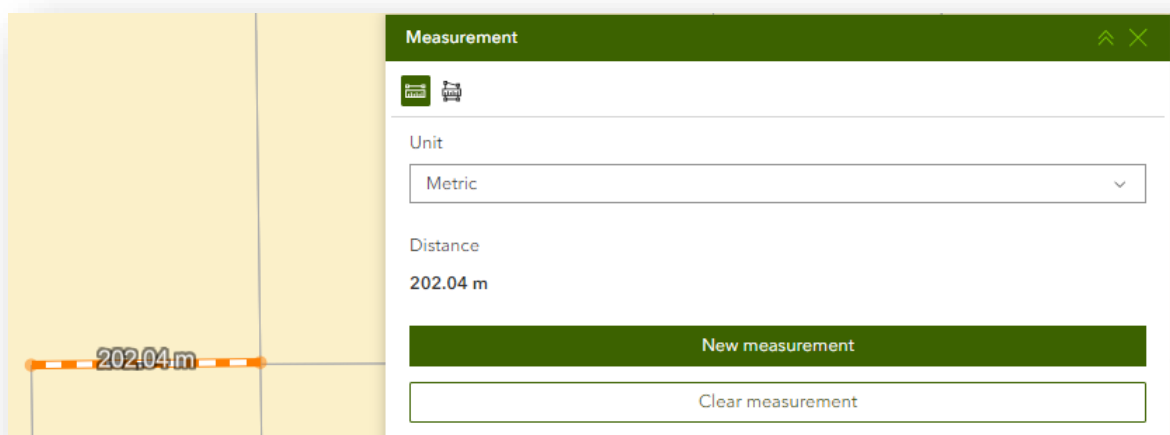
Measurement



The Measurement tool allows you to measure the area of a polygon or length of a line. To view the Measurement tool, close out of any open tools by clicking the X in the top-right corner.

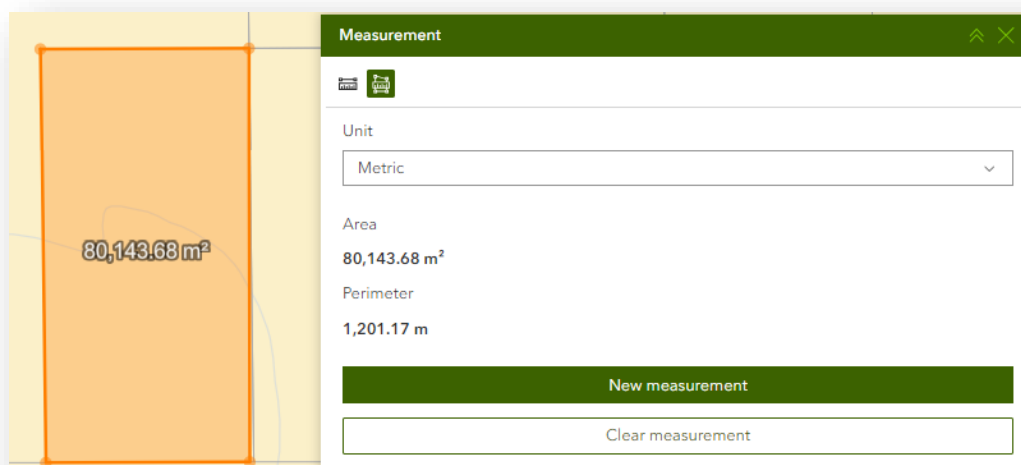
Polyline measurements

Click the Polyline measurement and draw a polyline on the map by clicking two or more points. Double-click to finish drawing the polyline. The Measurement tool will then display the total length of the polyline using the defined default length unit. To change the length unit, select the applicable unit of measure from the drop-down menu (Metric).



Polygon measurements

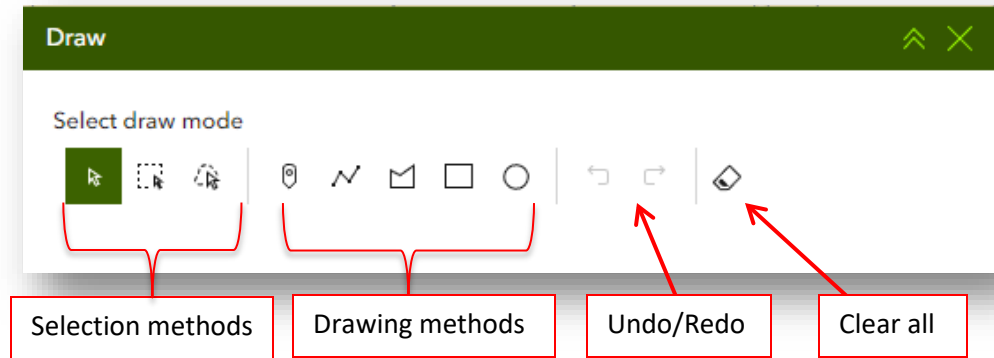
Click the Polygon measurement button, then draw a polygon on the map by left-clicking three or more points. Double-click to finish drawing the polygon. The Measurement tool will then display the total area of the polygon in square metres. To change the area unit, select the applicable unit of measure from the drop-down menu (Metric).



Draw



The Draw tool allows you to create graphics that display on the map. It can optionally add line distance or polygon area to the feature as text. Anything that is created using this tool is temporary and will be lost after refreshing the application.



Selection methods – Allow the user to select graphics that have been drawn. After selecting the feature, the user can move, reshape, duplicate and delete the feature.

Drawing methods – The user can create (from left to right on the image above) points, lines, polygons, rectangles, and circles. After choosing a drawing method, the user will be able to further choose the graphic's symbology and toggle whether to show measurements.

Undo/Redo – The user can undo, and redo completed graphics.

Clear all – This option clears all graphics that have been created.

Bookmark



The Bookmark tool stores a collection of map view extents (saved locations) displayed in the app. To Use the

Bookmark tool:

1. Click the Bookmark tool to display previously saved bookmarks.
2. Click one of the bookmark thumbnails to set the map extent to the bookmark area.
3. Add additional bookmarks by zooming to your desired location and clicking the Add (+) button.
4. Hover over the new bookmark, click the text to give it a meaningful name
5. Repeat steps 3 and 4 to add more bookmarks.
6. Hover over a new bookmark to remove or reorder it.
7. Click the close button in the window to close the tool.
8. Bookmarks can be deleted by selecting them and then choosing the delete button on the top-right corner of the thumbnail.

Caution: Your Bookmarks **will** be saved for your next visit to the app, but only on the computer/device that you made them. If you routinely clear your browsers cookies, then your bookmarks will be lost as well.

Print (Export PDF)



The Print (Export PDF) tool connects the web app with a printing service to allow the current map to be exported.

1. Click the print icon to open the tool.
2. Select the applicable **Template**. This is the layout style your exported map will be in.
3. Type a title for the map in the **Title** text box.

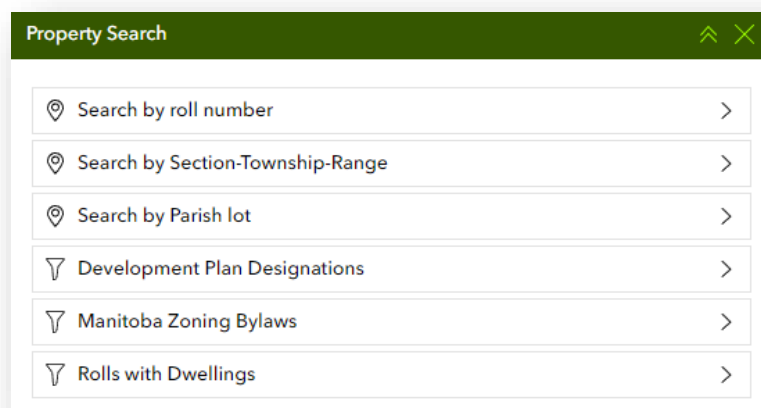
Note: The **MAP_ONLY** format prints only the map, omitting any marginal information from the output.

Optionally, click the arrow to the right of **Advanced** to open a menu with advanced print options. The advanced options include map printing extents, print quality, scalebar units as well as options to add/include an author, copyright, attributes, legend and north arrow.

Property Search



There are a variety of ways to search for properties, legal descriptions, and types of land use:



Search by roll number

Allows the user to search for a specific Assessment parcel in Manitoba.

Click the Search by roll number tool icon to open it. Select a locality from the list, enter the roll number and click Apply. The map frame will pan and zoom to the extent of the Assessment parcel with that roll number and the window will change to display the Assessment parcel's attributes.

Search by Section-Township-Range

Allows the user to search for a specific legal description under the Dominion Land Survey system.

Click the Search by Section-Township-Range tool icon to open it. Select from as many or as few of the parameters as required and click Apply.

In the example to the right, the user is searching for NE-1-2-3-WPM. Alternatively, if the user wanted to search the entire section, then they would leave Quarter as All.

Search by Parish lot

Allows the user to search for a specific legal description under the Parish system.

Click the Parish lot tool icon to open it.

1. Select a Parish Name from the list.
2. Select the type of lot (The codes are RL for River Lot, OT for Outer Two Mile Lot, SL for Settlement Lot, PL for Parish Lot, and WL for Wood Lot)
3. Type the lot number/letter and click Apply.

Search by Development Plan Designations

Allows the user to search for Development Plan Designation parcels with chosen parameters.

Click the Development Plan Designations tool to open it. The user may choose as many or as few parameters as required. The list of parameters includes searching by:

- Planning District
- Municipal name
- Municipal number
- Designation name (The designation name as they appear in the development plan bylaw)
- Designation category (The general category that the designation type fits into)
- Development Plan (The bylaw number of the Development Plan)
- Plan Amendment (The bylaw amendment number)

Note: The lists will query themselves based on prior choices. For example, after choosing a specific Planning District, only Municipalities within that Planning District will appear in the Municipality Name drop down list and so on for the other parameters.

Search by Zoning Bylaws

Allows the user to search for Zoning Bylaw parcels with chosen parameters.

Click the Zoning Bylaws tool to open it. The user may choose as many or as few parameters as required. The list of parameters includes searching by:

- Municipal name
- Municipal number
- Zone Bylaw (The bylaw number of the Zoning Bylaw)
- Zone Amendment (The bylaw amendment number)
- Zone Name (The zone names as they appear in the zoning bylaw)
- Category (The general category that the zoning type fits into)

Note: The lists will query themselves based on prior choices. For example, after choosing a specific Planning District, only Municipalities within that Planning District will appear in the Municipality Name drop down list and so on for the other parameters.

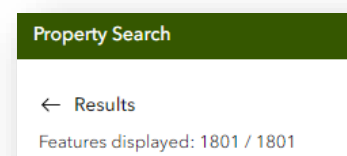
Rolls with Dwellings

Allows the user to search for Assessment parcels with specific amounts of dwelling units assessed.

Click the Rolls with Dwellings tool to open it. Select a locality from the list and enter the number of dwellings units is between and up to. For instance, choosing "0 and 2" will give you all parcels with 0, 1 or 2 dwellings while "1 and 1" will give you all properties with only 1 dwelling. Click Apply to search.

Special notes on the Property Search tool

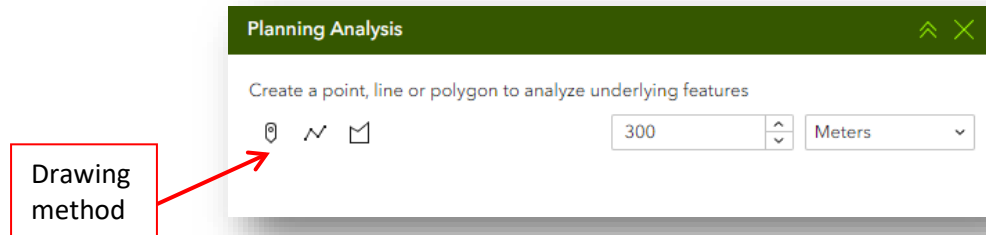
- The user's search will not properly display all results if the number of results is too high. This is normal in the Rolls with Dwellings tool. In this case, you will have to scroll down to load all the results until the Features displayed number equals the total number.
- From the Results window, you may click the arrow on the top-left corner to go back to your search parameters, click the delete icon on the inner top-right to clear the results or click the Actions icon on the far top-right to enable more actions. These actions have already been described under section [Select](#).



Planning Analysis

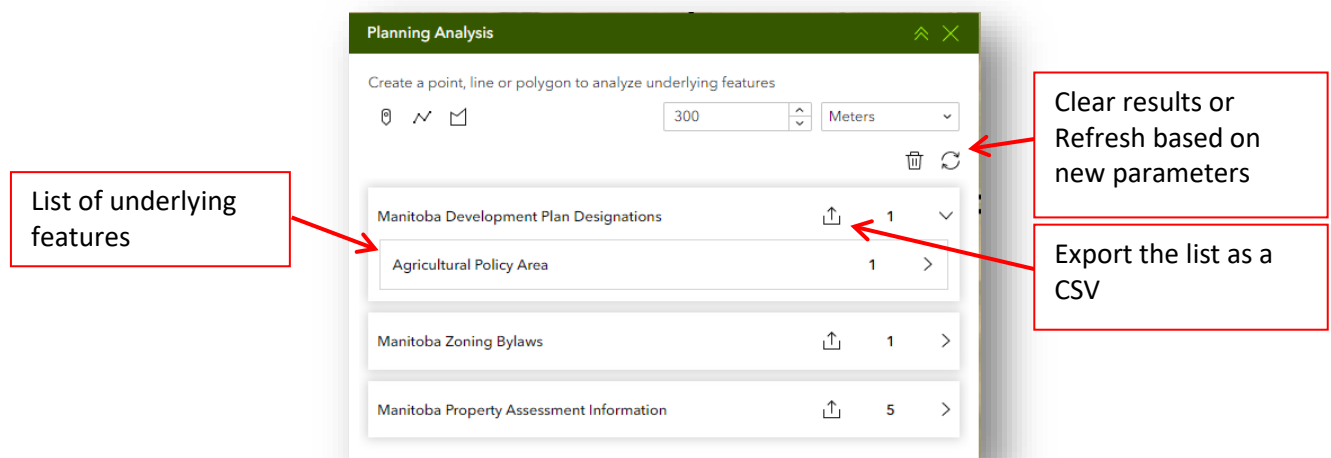


The Planning Analysis tool allows the user to buffer a shape and display all underlying Assessment parcel, Development Plan Designation and Zoning Bylaw features.



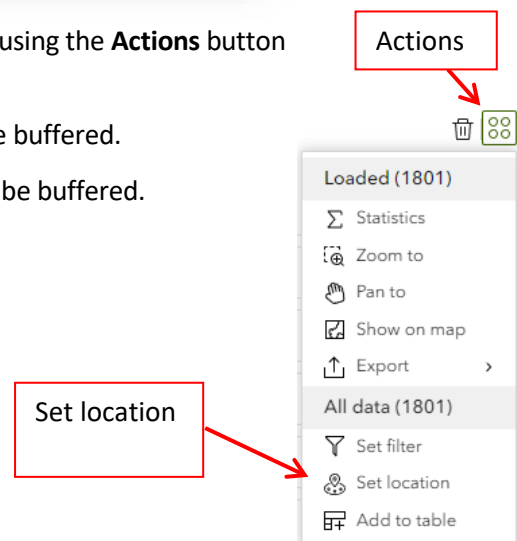
Select a drawing method (Either the point, polyline, or polygon symbols), update the buffer distance and units if desired, and then draw your shape by clicking inside the map frame. Double click to end the drawing.

The shape with its buffer will be generated on the map frame and a list of underlying features will display in the window.



The Planning Analysis tool can also be opened from other tools using the **Actions** button and selecting **Set location**.

- [Select tool](#); Use the selected features as the shape to be buffered.
- [Property Search](#); Use the search results as the shape to be buffered.



Elevation Profile



The Elevation Profile tool generates and displays an elevation profile based on an input path created by drawing lines.

Click the Draw button and then click on the map frame to draw the input path. Double click to complete the path. Users can view slope and elevation statistics and export the data for each profile.

Caution. This tool uses elevation services curated by Esri and the resolution and accuracy can vary dramatically depending on the data available. The user should use this tool with discretion.



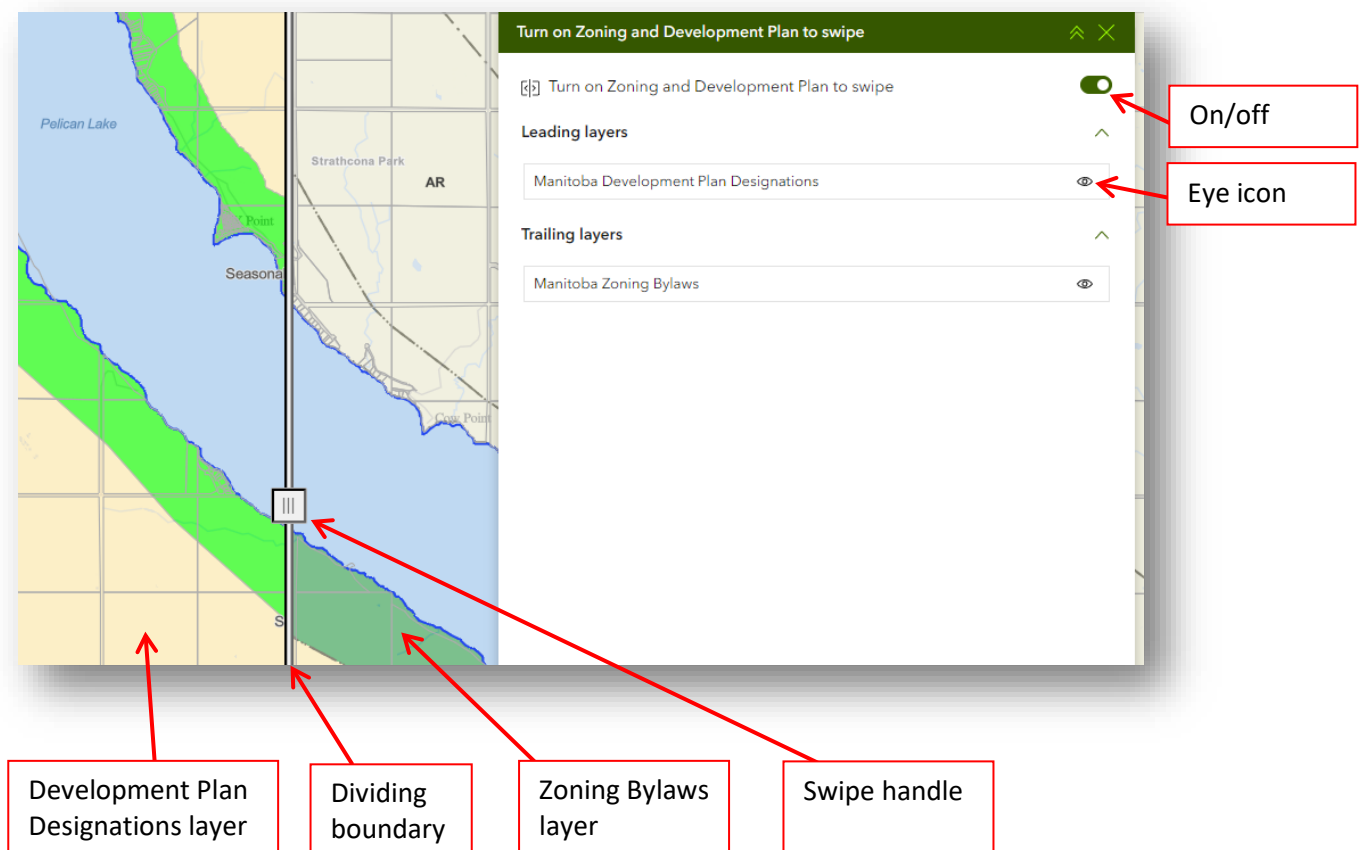
Swipe (Turn on Zoning and Development Plan Designations to swipe)



The Swipe tool allows the user to swipe between the Development Plan Designations layer on the left-hand side of a dividing boundary and the Zoning Bylaw layer on the right hand side. Click and drag the swipe handle left or right to adjust the dividing boundary.

The dividing boundary will remain on until the toggle on/off switch is clicked to the off position.

If either the Zoning or Development Plan Designations layers are turned off, then you may turn them on by clicking the drop-down arrow next to Leading/Trailing layers and clicking the eye icon so that it does not have a line crossing through it.



Get Coordinates



The Get Coordinates tool allows the user to get coordinates of a point and convert those coordinates.

Click the Add Point button and then click on the map frame to generate the coordinates in decimal degrees as well as the equivalent in a variety of other coordinates such as degrees-minutes-seconds and long-lat. Use format settings to alter your results.

Get Coordinates

Input (DD)

Enter Coordinates/Address

+

Address

DD

DDM

DMS

Long-Lat

Add Point

Format settings

Add Data



The Add Data tool allows the user to add a variety of different types of data to the map.

To begin click, **Click to add data**. This opens a search window where you can choose to add data based up searching ArcGIS Online published content, a known URL, or a local file.

Adding data from ArcGIS Online – The user can filter results based on the drop-down list. By default, the chosen filter is Manitoba Government curated data. The user can enter in search parameters and the list of feature services will adjust based upon the user’s entry. Select one or more entries and click Done.

Adding data from a URL – The user can enter in the URL of a feature service, choose the type of service from the drop-down and click Add.

Adding data from a File – The user can Upload a file to be added to the map. The supported formats are Shapefile, CSV, KML, GeoJSON, GPX. Shapefiles must be in a zipped folder in order to upload them. After uploading, click Done.

After click Done, your data will not yet be added into the map. The data will be listed in the Add Data window. From here, the user can **Rename** the data (This does not affect the original data), perform **Actions**, or **Remove** the data. Click the Actions button to perform a variety of actions. Click **Add to map** to add the data to your current map frame. Depending on the type of data being added, the user may also perform other actions noted in the [Select](#) guide.

Buffer Property

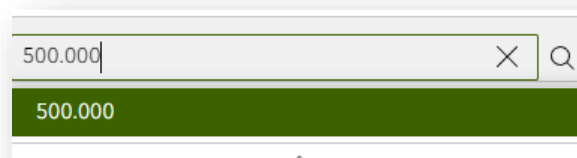
Buffer Property

The Buffer Property tool allows users to buffer a single Assessment parcel and analyze information from the underlying Assessment parcels layer within that buffer.

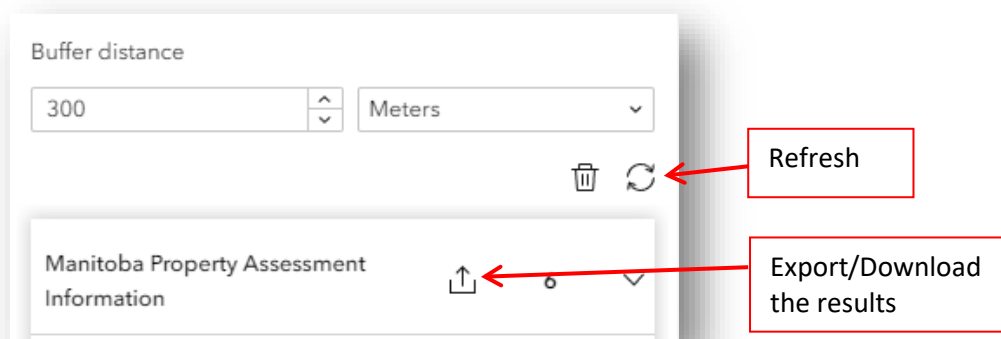
1. Click on the Buffer Property tool to open.
2. Choose your Municipality by selecting a locality from the list.



3. Enter the roll number of the Assessment parcel you want to buffer and click Enter/Return or select the result.



4. The Assessment parcels underlying the buffer will be listed. Click on the upwards pointing arrow to download a CSV of the list.
 - a. You may change the buffer distance (Default is 300 metres) and click the Refresh button to get the new results.



- b. If your parcel borders another Municipality, you may click the Municipality toggle off and click Refresh to get the results from both Municipalities.

Location Tools

The location tools allow you to quickly switch between locations on the map.

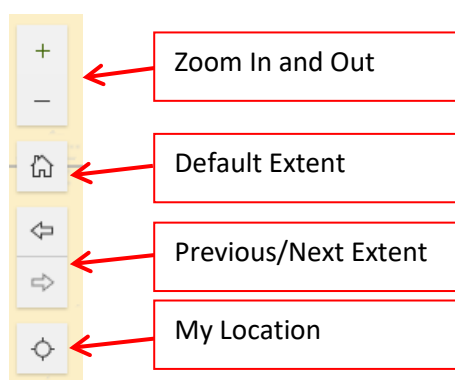
Zoom In and Out – Although you can use your mouse wheel (on a computer) or two fingers to pinch (on a mobile device), these buttons will zoom the map extent in and out.

Default Extent – Pressing this button will zoom the map to the entire Southern Manitoba.

Previous/Next Extent – Pressing these buttons will re-centre the map to locations that you previously visited in the current instance. If you zoom and pan around the map, you can go back to previous locations.

My Location – Based on GPS (mobile) or HTML geolocation (computer) the app will detect your location, and centre the map on your position.

Note: The information clears itself if you reload the app.



Help

For further information, please visit: http://www.gov.mb.ca/mr/land_use_dev

or email MapCRP@gov.mb.ca.