



PUBLIC WEB VIEWER – USER GUIDE

Prepared for Buffalo City Metropolitan Municipality

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1 INTRODUCTION

Welcome

The User Guide for the Corporate GIS Web Viewers enables users to become competent with the core functionality of the Public Web Viewer. It could also serve as a training manual. This is with the assumption that the user is familiar with general GIS concepts.

Purpose

The responsibility of the GIS Unit is to communicate and disseminate information relating to BCMM's spatial data. The objective is to ensure that the public have access to spatial information, not easily available on other platforms. It is also to share information relating to property boundaries and infrastructure.

1.1 Public Map Viewer

The Public Map Viewer contains standard navigation functionality such as pan, zoom and searches.

The Public Map Viewer consist of the following widgets – Identify, Layers, Bookmarks, Draw, Measurement and Print.

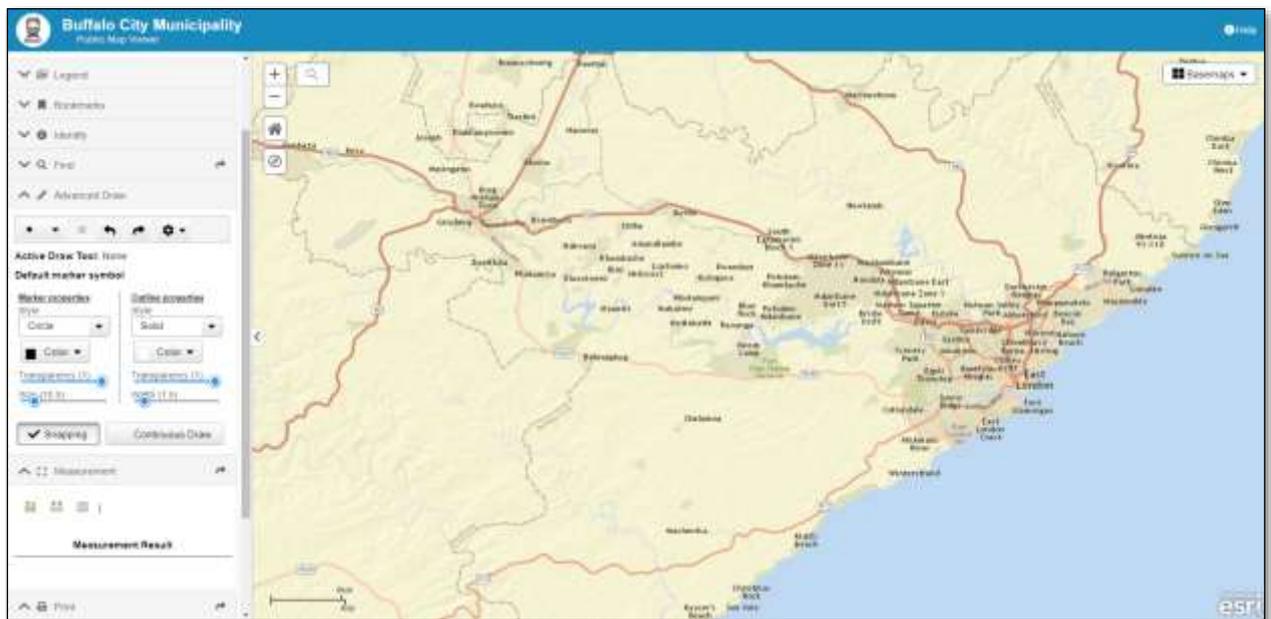


Figure 1: Overview of Viewer

2 Standard Navigation

2.1 Disclaimer

The disclaimer is visible each time a user enters the viewer. The purpose of the disclaimer is to ensure that users are aware that there are limitations to data accuracy and data availability.

“The Buffalo City Municipality makes no warranty, implied or expressive, with respect to the accuracy, correctness, completeness or appropriateness of any information contained in this site.”

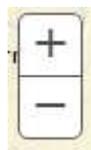


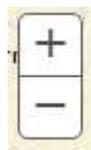
Figure 2: Disclaimer pop-up window

2.2 Viewer Widgets

The Zoom Slider Widget

1. Using the Zoom Slider widget:



- Click the plus or minus button  to zoom in or out on the map.

2.2.1 The Home Button Widget

2. Using the Home Button widget:



-  When the application starts, the Home Button widget is automatically enabled. Clicking it resets the map extent to the map initial extent.

2.2.2 The My Location Widget

3. Using the My Location widget:



- When the application starts, the My Location widget is automatically enabled to access your physical location. Clicking **Find my location** zooms the map to your current location.

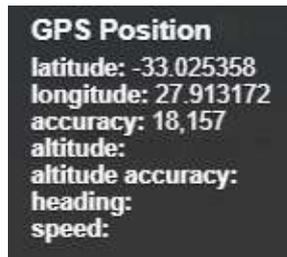


Figure 3: Find my location



Tip:

You might get an error message after clicking **Find my location**. The error is often caused by the browser's security. Check the browser's pop-up settings to allow sharing your location. Click **Yes** to find your location.

2.2.3 The Scalebar Widget

4. Using the Scalebar widget:

- When the application starts, the Scalebar widget is automatically enabled and displayed at the lower left corner of the application. It is updated dynamically when the map's scale changes.



2.3 In-panel Widgets – Header Controller

2.3.1 Search Widget



The Search widget enables end users to find locations or search features on the map. By default, the widget uses the geocoding service from your organization or portal and displays searchable layers configured in the map, if available.

- a. Further, you can add more geocoding services or configure specific layers within your map to be searchable using the widget's configuration window.
- b. The following methods of finding a location are supported, given that they are supported in the geocoding services:
 - Place-name
 - Point of interest
 - Address
- c. The following layers are searchable with Query capability enabled:
 - Hosted feature layers
 - ArcGIS Server feature service layers
 - ArcGIS Server map service layers

When you enter a place-name or a keyword in the search box, you see suggestions as you type. If you see an arrow in the search box, you can search on all sources, or click the arrow and choose a locator or layer from the drop-down list.



Figure 4: Search box

- a. Click on the search icon and type in your search.
- b. The search will be populated with a result list.
- c. Select your result and press enter to zoom to the result.

2.3.2 The Layers List

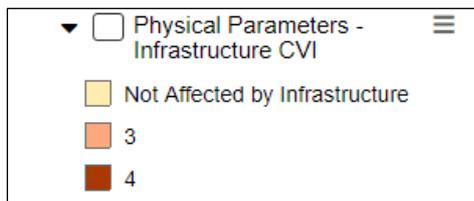
2. Using the Layer List widget:



Figure 5: Layer list

The Layer List widget 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. Layers having expansion arrows indicate that they contain sublayers or subtypes.

The order in which layers appear in this widget corresponds to the layer order in the map. This widget provides functionality allowing you to change the order of layers in the map.



- a. Clicking the Layer List widget in your app displays the layer list or table of contents window.
- b. If the **Show Legend** option is checked, clicking an individual layer shows its symbols.
- c. Clicking the down arrow on the right side of a layer displays the layer menu, which includes the following functions:
- d. **Zoom To**—Sets the map extent to the extent of the layer.
- e. **Transparency**—Sets the transparency for the layer.
- f. **Enable Pop-up / Disable Pop-up**—Enables or disables the pop-up for the feature layer. If a feature layer does not have a pop-up configured in the map, clicking **Enable Pop-up** shows all field values for the feature layer.
- g. **Move up**—Moves the layer one level up.
- h. **Move down**—Moves the layer one level down.
- i. **View in attribute table**—Opens the attribute table for the feature layer.

- j. The  icon on the upper right, next to **Operational Layers**, controls the behaviour of all the layers in the list. Click the icon to open the menu, which allows you turn on or off all the layers or expand or collapse all the layers. Alternatively, you can use keyboard shortcuts to do so. Press Ctrl and click the check box of the layer to turn on or off the layers in the same level. Press Ctrl and click the arrow to expand or collapse layers in the same level.
- k. Layers are greyed out in the list when zoomed out of their visible ranges.
- l. Clicking the x button in the upper right corner of the **Layer List** window closes it.

2.3.3 The Legend Widget

3. Using the Legend widget:



The **Legend widget** displays labels and symbols for layers in the map.

- a. The below item displays layers and symbology.

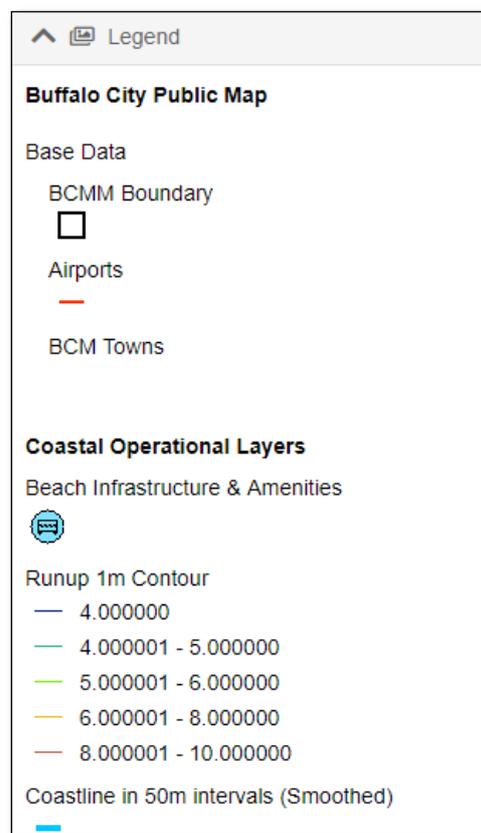


Figure 6: Legend

2.3.4 Add Bookmark Widget

The **Bookmark widget** stores a collection of map view extents (that is, spatial **bookmarks**) displayed in the app. It also allows you to create and add your spatial **bookmarks** through configuration or at run time after the app starts.

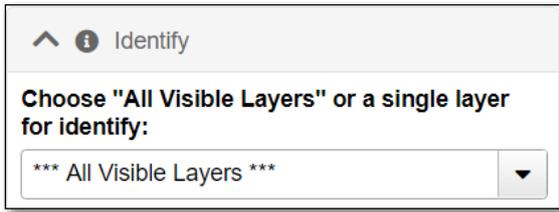
4. Using the Bookmark widget:

3.1 Zoom to an area of the map you would like to Bookmark.

3.2 Click on the **Add Bookmark** and enter a name



2.3.5 Identify Widget



The identify widget enables the user to select a layer from the dropdown list and click on the map to identify a feature.



Figure 7: Visible layers

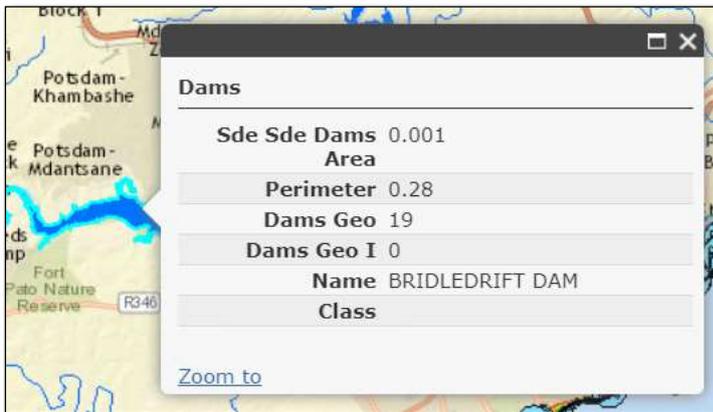


Figure 8: Identifying a feature on the map

The above image indicates which feature has been selected, displaying the name of the feature (Bridledrift Dam)

The user is also able to zoom to the feature by clicking on the [Zoom to](#) link. The result is displayed below:



Figure 9: Zoomed in feature on map

2.3.6 Select Query

The Query widget allows you to retrieve information from source data by executing a predefined query.



2.3.7 Advance Draw Tool

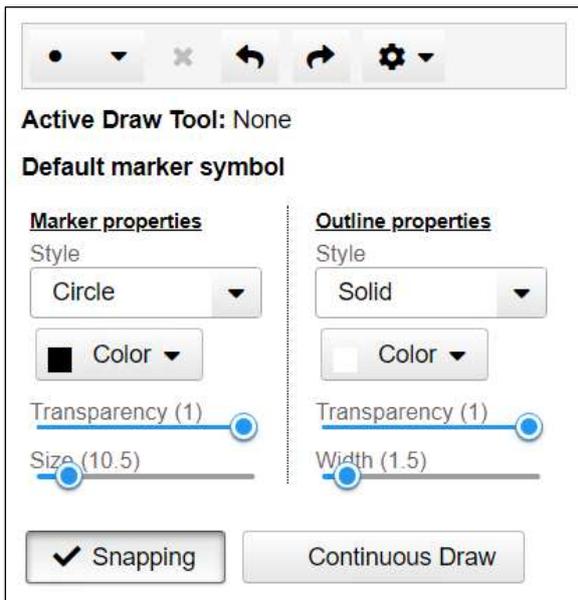


Figure 10: Advance Draw Tool Widget

Adding a Point, Polyline, Polygon, Text, Freehand and shapes to your map is easy and straight forward. Select the **T** tool to display various options.

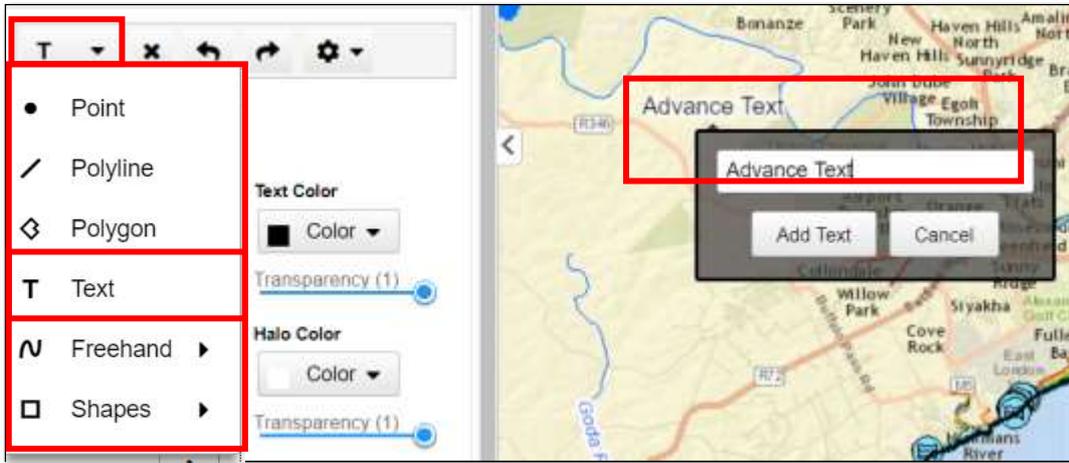


Figure 11: Advance Draw tool

In Figure 11, the user can create labels for the map, add shapes and give them distinctive colours which match their colour scheme.

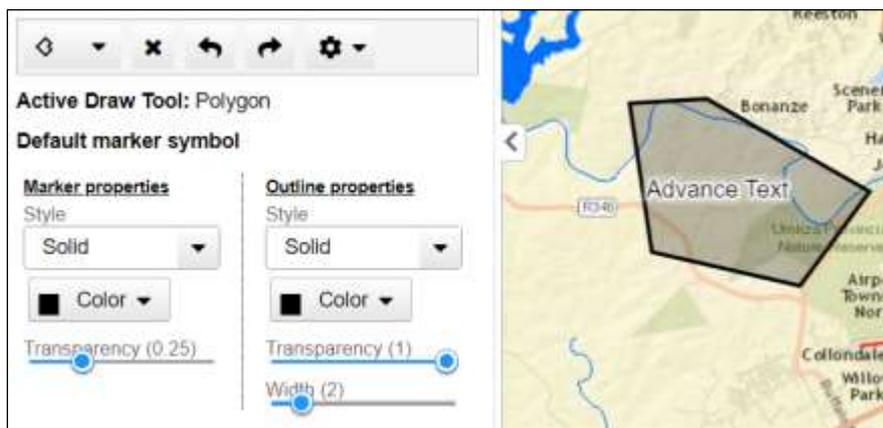


Figure 12: Draw tool selection

Figure 12, demonstrates a Polygon drawn over a certain area.

2.3.8 Measurement

The Measurement widget allows you to measure the area of a polygon or length of a line or find the coordinates of a point.



Figure 13: Measurement widget

Measure the following:

- Area
- Distance
- Location



Figure 14: Measuring area

Figure 14 shows an area drawn and the distance calculated.

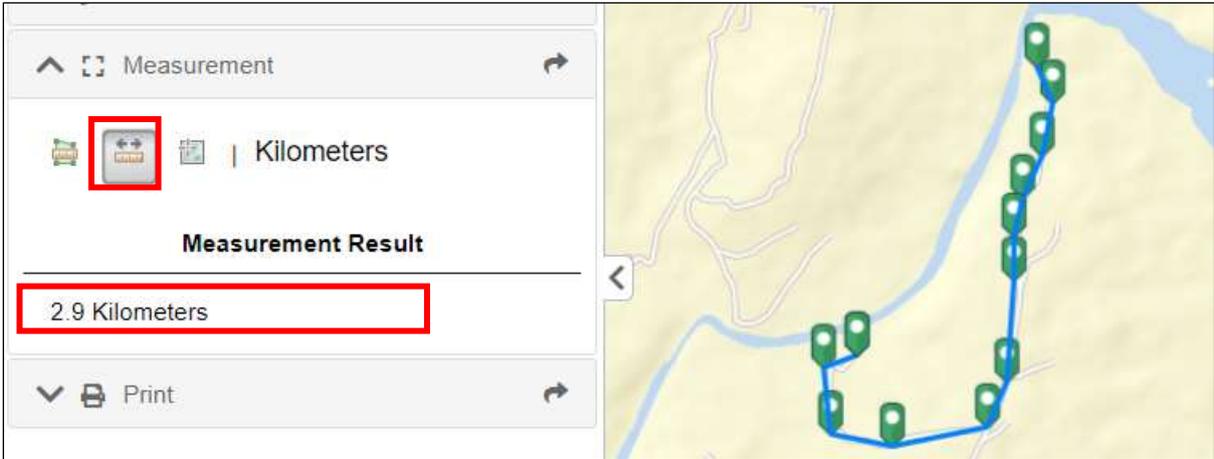


Figure 15: Measuring distance

Figure 15 shows the Distance measured and the result displayed below in Kilometres.

2.3.9 Print Widget

The Print widget connects the web app with a printing service to allow the current map to print.

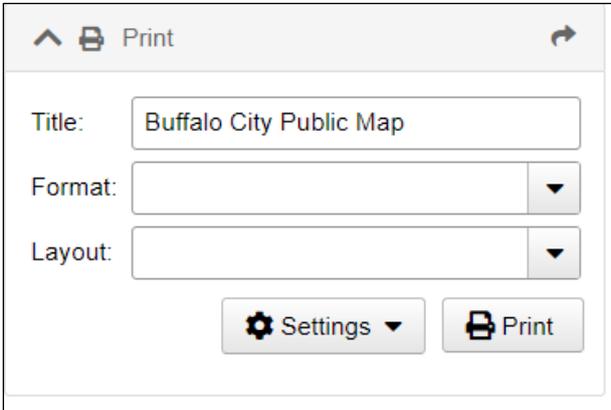


Figure 16: Print widget

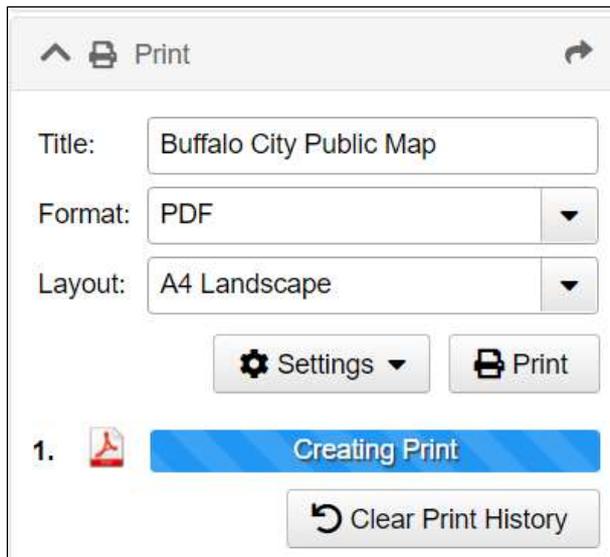


Figure 17: Print widget setup and ready to create print

2.3.10 Help

The help link is located to the top right of the application.

Navigation, Search and Tools headings will assist you with the basics.

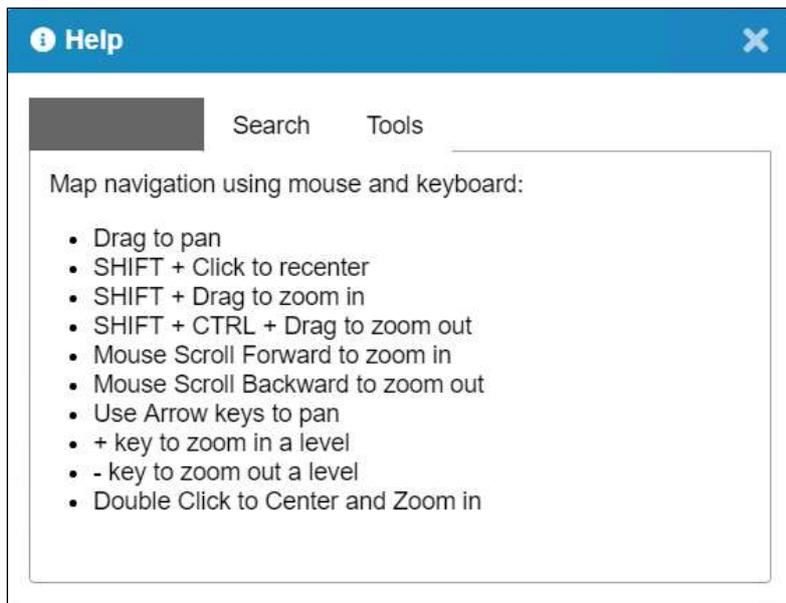


Figure 18: Help dialogue box

Further help and assistance may be found at: <https://www.buffalocity.gov.za/>