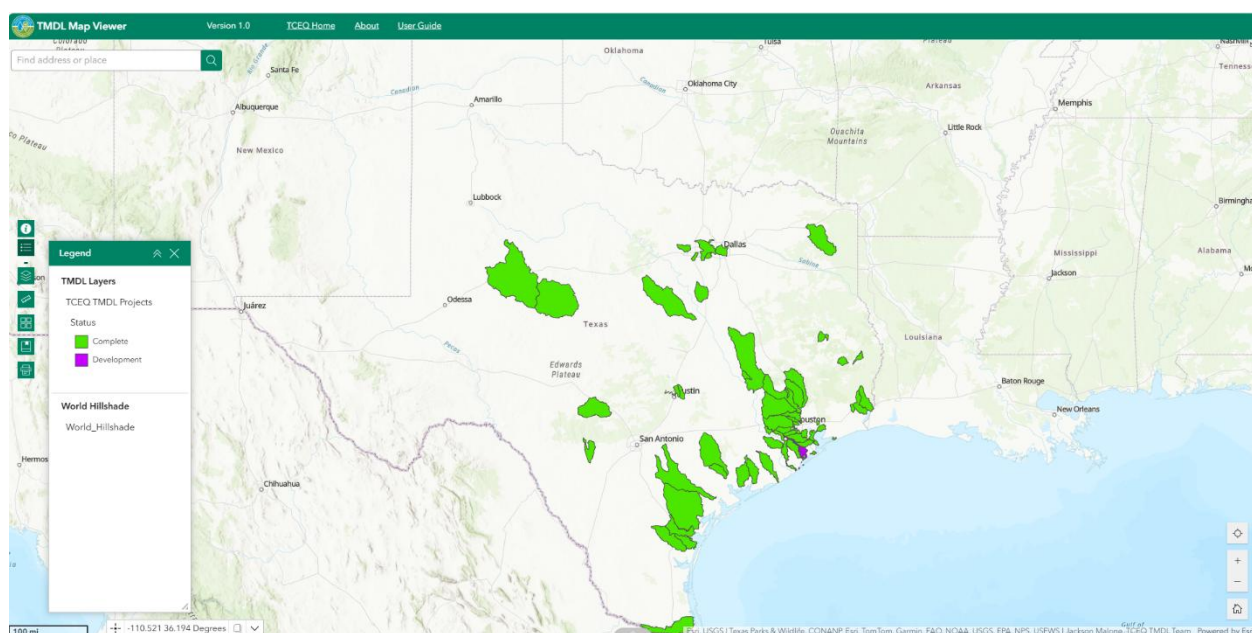


Total Maximum Daily Load (TMDL) Program Viewer User Guide



Texas Commission on Environmental Quality



Water Quality Planning Division

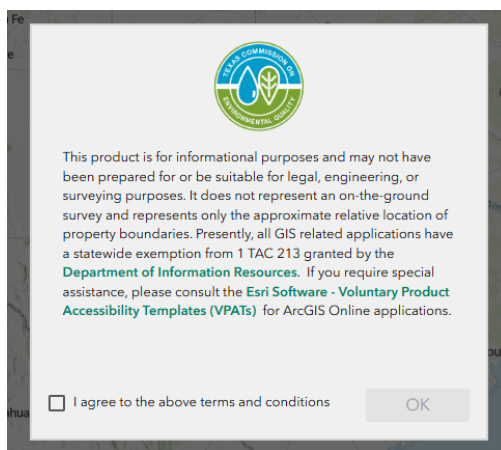
Contents

Total Maximum Daily Load (TMDL) Program Viewer	1
Water Quality Planning Division.....	1
Navigating Around the Map.....	3
Splash Screen Pop Up:	3
Viewer Header:.....	3
Widget Controller:.....	4
Attribute Table:.....	13
Map Tools:.....	13
Contact Us	15

Navigating Around the Map

Splash Screen Pop Up:

When first accessing the Viewer, you will see a pop-up that includes disclaimer information on the intended use of the application. Users must select the checkbox next to “I agree to the above terms and conditions” and then the “OK” button will be selectable. Click the OK button to exit the window and continue to view the application.



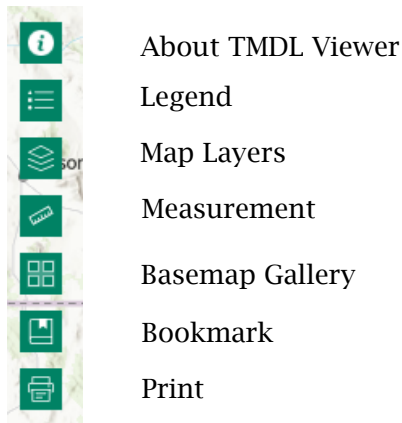
Viewer Header:

The header section of the Viewer includes the Viewer’s title and essential information about the Viewer. It provides links to the TCEQ Homepage, the viewer’s landing page under the TCEQ Geographic Web Apps page, and the Viewer’s User Guide. A version number may also be displayed to assist version control for developers.




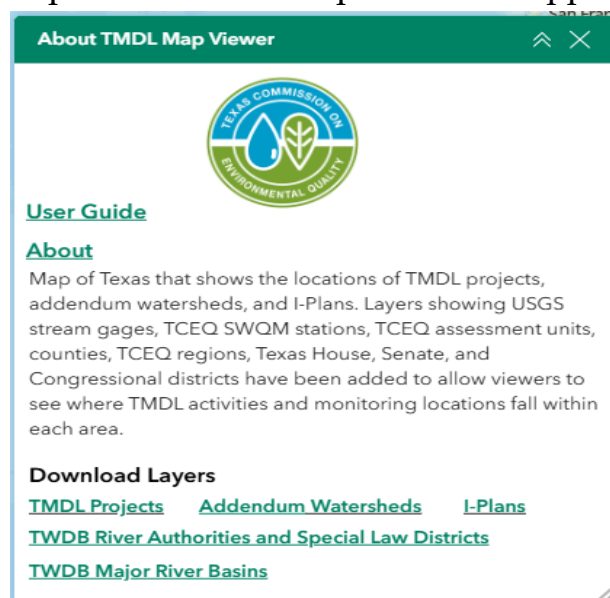
Widget Controller:



The widget controller is located on the left-hand side of the Viewer. It hosts individual widgets to conduct varying actions such as measuring or changing the basemap being displayed.

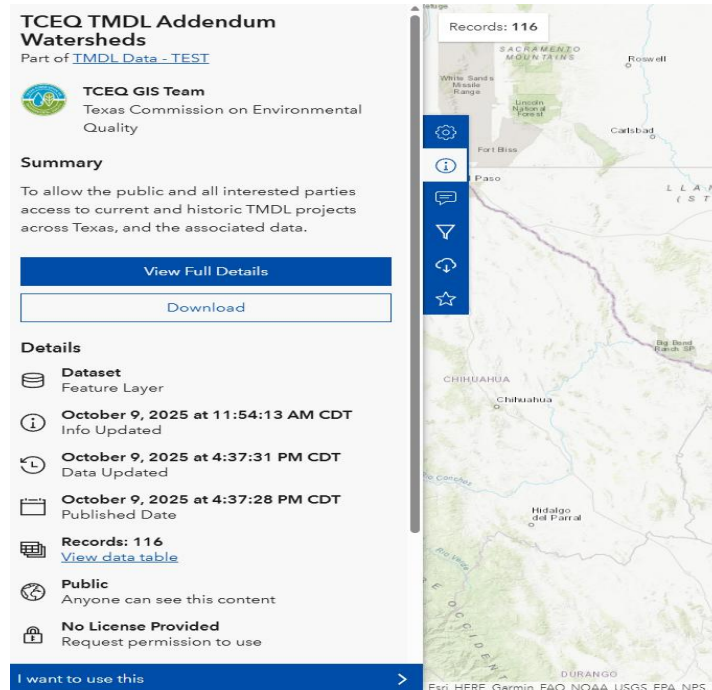


About

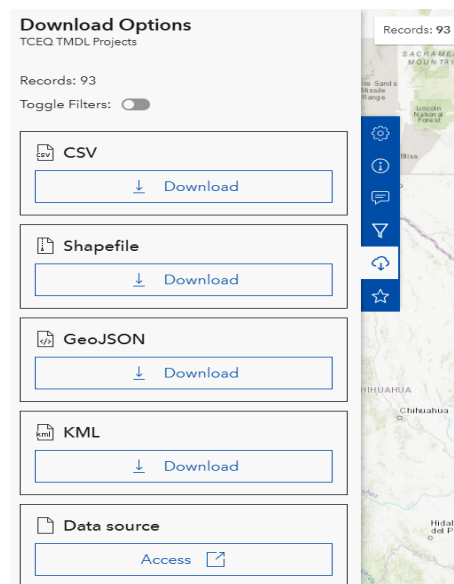
- The **About** widget provides users with essential information regarding the application, including its, purpose, user guide, data sources, and any credits or acknowledgements related to the content.
- To use the **About** widget, click on the  icon in the widget controller
- This opens a brief description of the application.



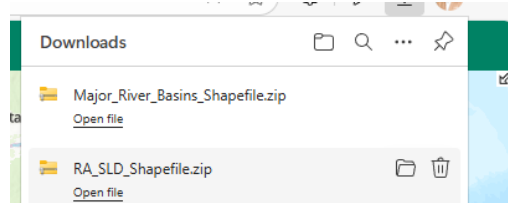
- To close the window, click the  in the upper right-hand corner.
- To collapse the window, click the  just to the left of the close button.
- **Download Layers**
 - Under Download Layers, click on **TMDL Projects**, **Addendum Watersheds**, and **I-Plans** to navigate to the Datahub.






- In the new window, click Download to access the desired downloadable file format.

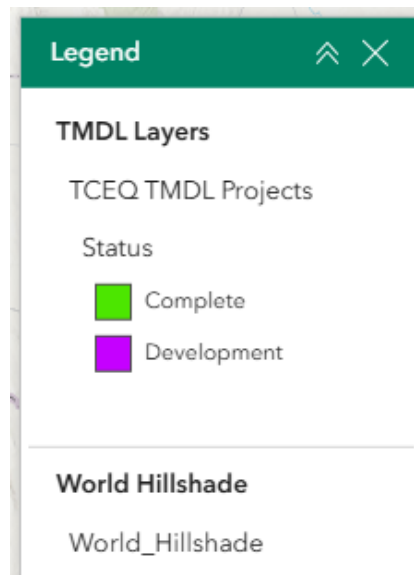


- Clicking on **TWDB River Authorities and Special Law Districts** or **TWDB Major River Basins** will instantly download the layer in shapefile (.shp) format.




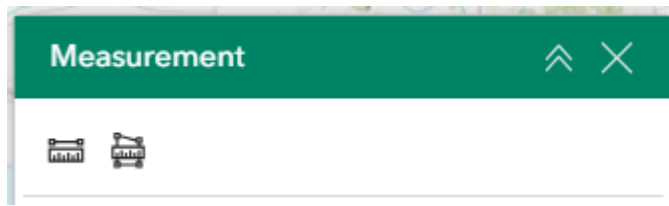
Legend



- The **Legend** widget shows the symbols for the various layers on the map.
- Simply click the **Legend** button  in the widget controller
- To close the window, click the  in the upper right-hand corner.
- To collapse the window, click the  just to the left of the close button.
- The legend will only show those layers that are currently turned on using the layers tool.



Measurement

- The Measurement widget enables user to calculate the area, and distance directly on the map.
- To measure a feature, click on the **Measurement**  widget in the widget controller.
- The Measurement window will appear as shown below.



- To close the window, click the  in the upper right-hand corner.
- To collapse the window, click the  just to the left of the close button.
- There are two different ways to measure features on the map:





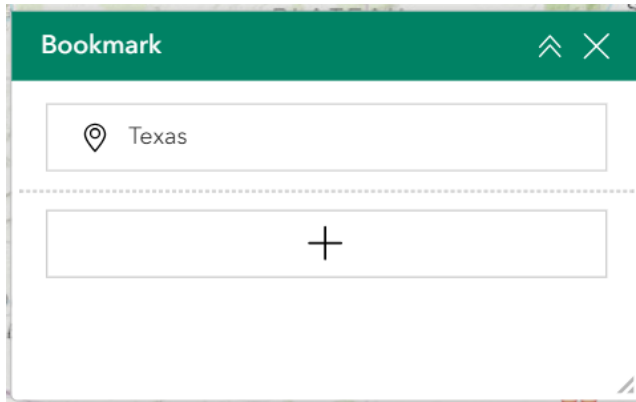
Area - Click this button, choose a unit of measure from the drop- down list, then single-click the first point of your polygon on the map. Continue to single-click until you have finished measuring your area feature. Double-click to end. Results will appear in the Measurement window.




Distance - Click this button, choose a unit of measurement from the drop- down list, then single-click the first point of your line on the map. Continue to single-click until you have finished measuring your linear feature. Double-click to end. Results will appear in the Measurement window.



Bookmarks

- The **Bookmark** widget enables users to navigate to predefined map locations.
- To **Create** a bookmark, navigate to the desired map extent and click on the Bookmark widget  in the widget controller.
- Click on  icon in the window.




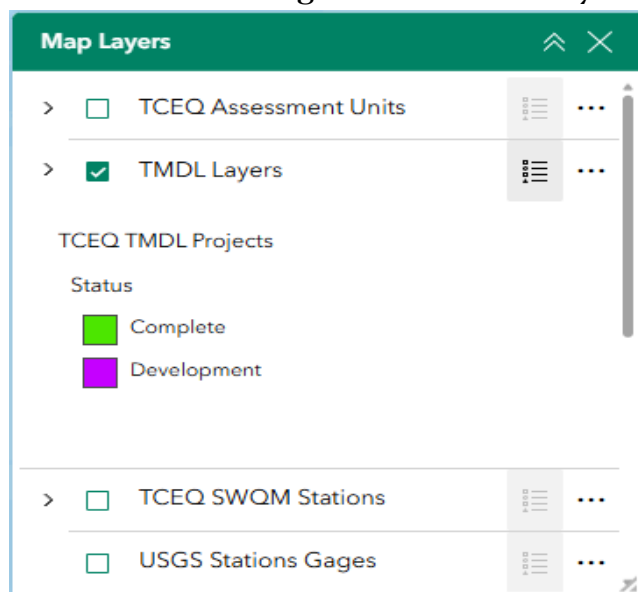
- Click on the name of the bookmark to rename it. Click on the  icon on the right to remove the bookmark.



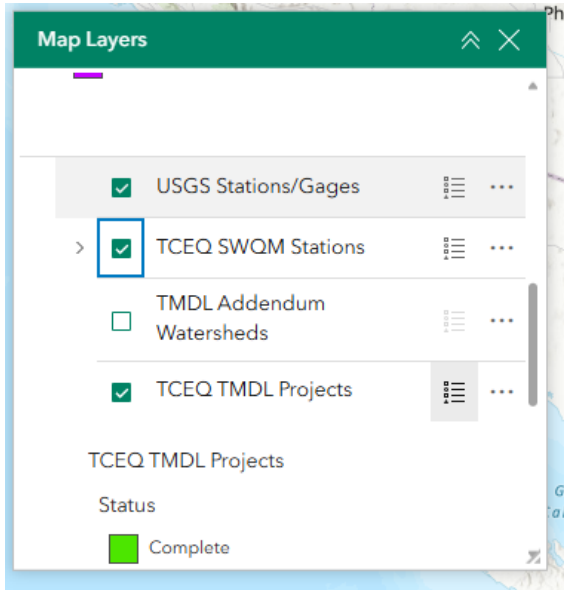
- To close the window, click the  in the upper right-hand corner.
- To collapse the window, click the  just to the left of the close button.

Layers

- The **Layers** widget can be used to turn on and off data layers such as the Surface Water Intake and the current query results.
- To **view** the layers, simply click the **Layers** button  in the widget controller.
- Then browse through the available layers.




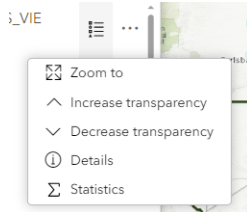
- To **Toggle the layer visibility**, locate the layer in the list and click on the checkbox next to the layer name. This toggles the visibility on and off the map.




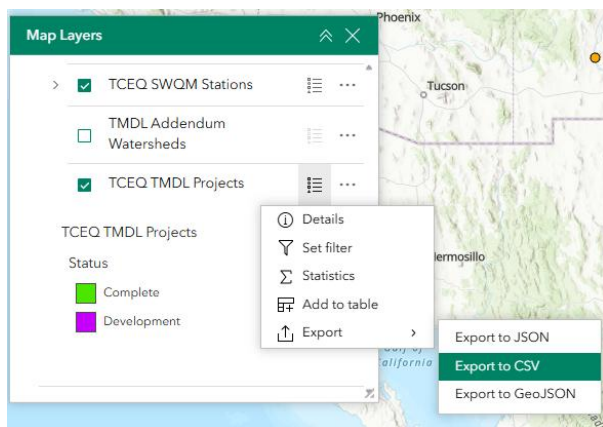
- **Expand** the layer by clicking the small arrow to the left of the check box. Here you can see the layer symbology.





- To **Zoom, order, get details and statistics** of the layers, click on the **options** button  and select the desired option.




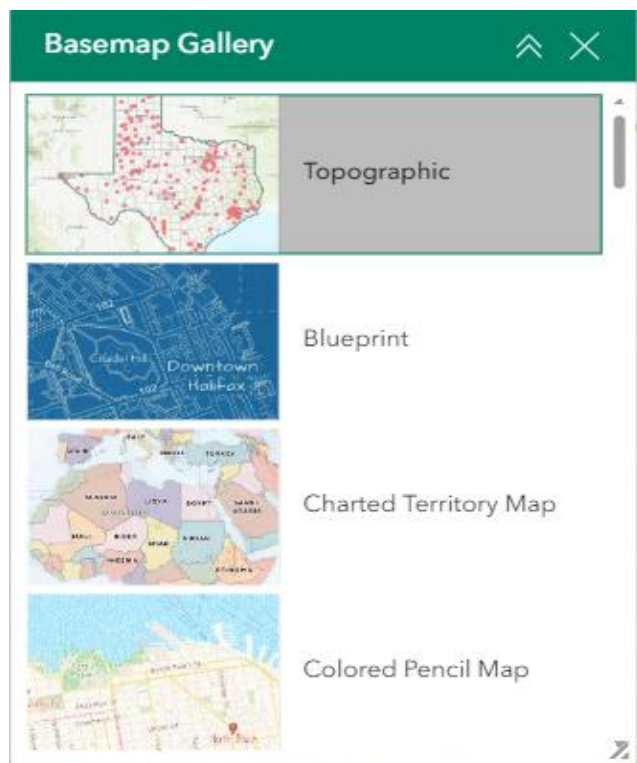
- To **export** layer data, click on the **options** button , select **Export** and choose desired export format(JSON, CSV, or GeoJSON).





- To close the window, click the  in the upper right-hand corner.
- To collapse the window, click the  just to the left of the close button.


Basemap Gallery

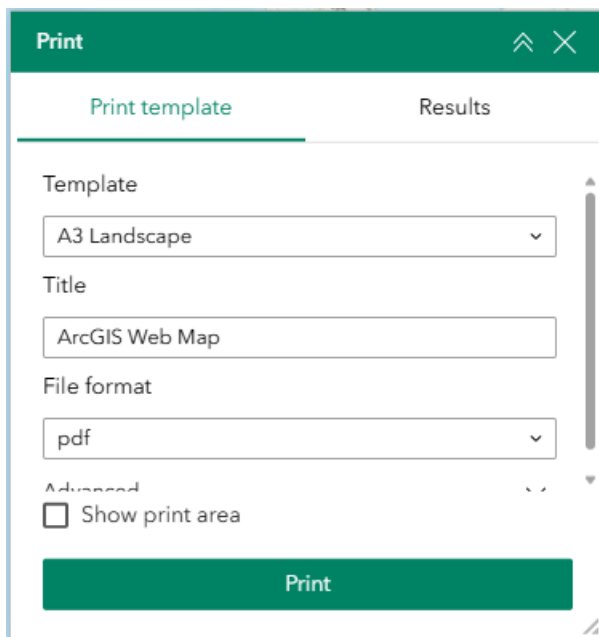
- The **Basemap Gallery** widget can be used to change the background in the map viewer. The topographic basemap is the default basemap.
- To change the basemap, click on the Basemap Gallery widget  on the widget controller, then select the basemap you wish to use.



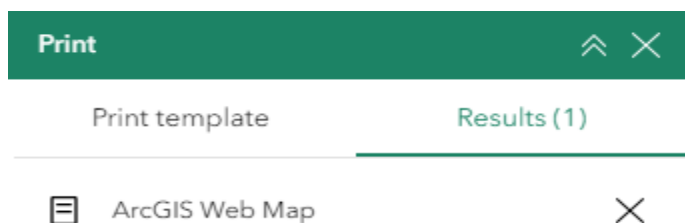
- You may choose from thirty-four different basemaps.
- To close the window, click the  in the upper right-hand corner.
- To collapse the window, click the  just to the left of the close button.



Print


- Use the **Print** widget  to save the current map as a pdf file. You may give it a customized title and select a layout and size. Advanced features include ability to add map scale, author, copyright, north arrow, and legend. You may also set the map extent and printing quality.

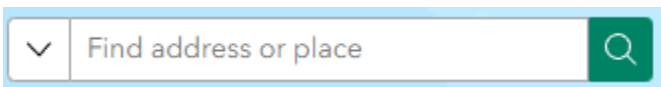


- After clicking print, the results will show in the results panel of the Print window.



- To close the window, click the  in the upper right-hand corner.
- To collapse the window, click the  just to the left of the close button.

 **Search Bar** – Type in an address or place into the bar to search for a location. As you type, you will be presented with similar matches. If you see your desired location appear, simply click on it and the map will zoom to that location. Or you can complete typing in the location and then press Enter on the keyboard or click the magnifying glass. You can click the X on the bar to clear out the search bar.

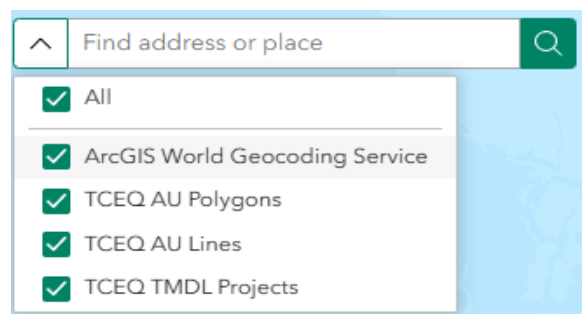


The following are examples of the types of searches you can perform.



- Addresses: 100 Congress Ave, Austin, TX, 78701
- Names: Zilker Park
- Counties: Travis County

Search Options

1. On the **search bar**, click the **dropdown arrow** on the left to expand the list of available search options.
2. From the dropdown menu, select your preferred **search type**, such as:
 - **AU Number, TMDL Project Name** etc.
3. Once selected, type your search term in the bar and proceed as described in the **Search for a Location** section.



Attribute Table:

To view the attribute table, click on  icon at the bottom of the viewer. The attribute table will expand. To collapse the attribute table, click on the  icon at the top of the table.

TCEQ TMDL Projects										
TMDL Addendum Watersheds TMDL I-plans USGS Stations Gages TCEQ AU Polygons TCEQ AU Lines TCEQ SWQM Stations - Active TCEQ SWQM Stations - Inactive TCEQ GCD TCEQ Rr >										
OBJECTID	TMDL Doc	Parameter	TMDL Doc ID	TMDL Webpage	Acres TMDL	Status	FY Adopt	Datum	Organ	
1	Dickinson Bayou	BacT	080	View	67973.601563	Complete	2012	NAD83	TCEQ TN	
2	Dickinson Bayou	BacT	080	View	67973.601563	Complete	2012	NAD83	TCEQ TN	
3	Chocolate Bayou	BacT	114A	View	110562.000000	Complete	2024	NAD83	TCEQ TN	
4	Halls & Willow Bayou	BacT	114C	View	44015.199219	Development		NAD83	TCEQ TN	

Total: 93 | Selection: 0



To **refresh** the attribute table, click on .



To **show or hide columns** in attribute table, click on .



To **filter by connected map extent**, click on . This will show only the records within the current map extent.



Click on to perform **actions** such as set filtering, zooming, panning, viewing statistics, and exporting of data.

Map Tools:

The zoom tools are located on the bottom right-hand side of the map application.





Zoom In – Click this button once or multiple times to *zoom in* at fixed increments



Zoom Out – Click this button once or multiple times to *zoom out* at fixed increments



Home – Click once to return to the default extent



My Location – Clicking this button will take you to your current location.





Scale Bar – shows the scale of the map at your current extent, located in the bottom left corner of the viewer window.


Coordinates

- The **Coordinates** widget is found on the bottom left corner of the viewer window, above the scale bar. The coordinates automatically update to the location of the cursor in the viewer window.




- To get the coordinates of a particular location on the map, click on the  icon.
- Click on the map to create a marker . The coordinates widget will update with the coordinates of the marker.






- You can copy the coordinates of the marker by clicking the  icon.

Overview Map

- The **Overview Map** tool provides users with a smaller navigational map that offers an overview of the entire map or application. It helps users quickly locate their position within the larger map and navigate more efficiently.
- To use the **Overview Map** tool, click on the  icon located in the upper-right corner of the map, directly below the **header bar**.



- A small map  will appear, displaying your current view within a larger extent.
- To pan, click and drag the dark grey rectangle  within the overview map to adjust your location.
- To collapse the small map, click on the **Overview Map** Icon  again.

Contact Us

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Telephone: [512-239-6682](tel:512-239-6682)