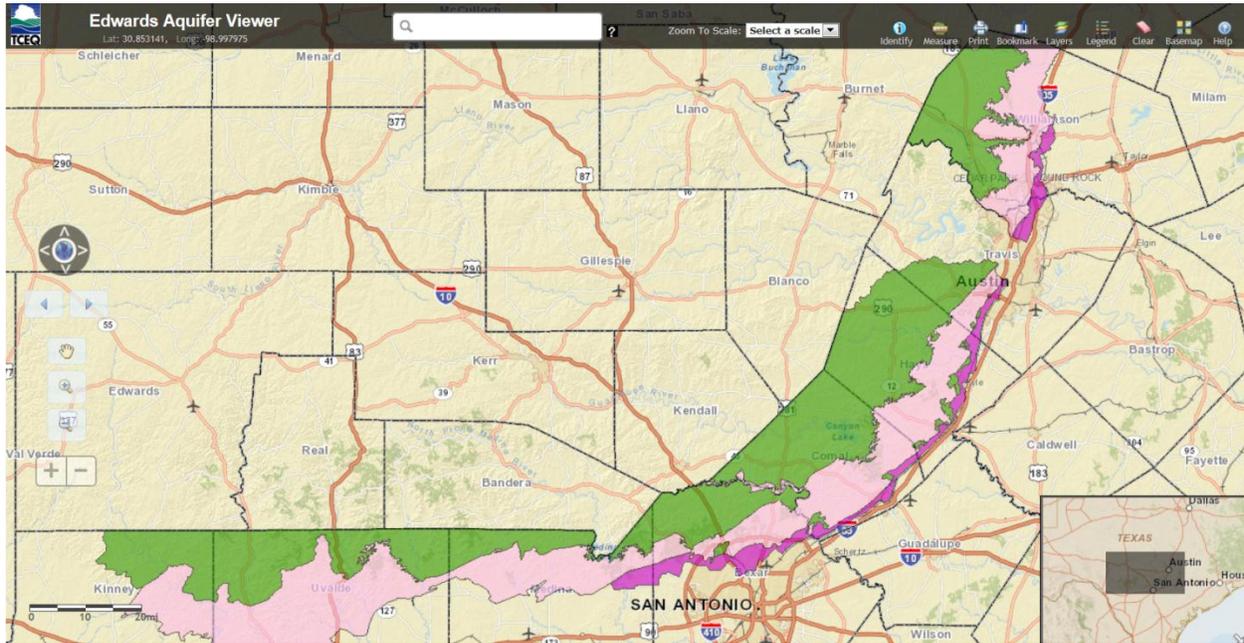


Edwards Aquifer Map Viewer – User Guide



The **Edwards Aquifer Map Viewer** allows users to:

- View the Edwards Aquifer maps of regulated zones with a web browser.
- Identify areas of Texas that are subject to TCEQ regulation under the Edwards Aquifer Protection Program.
- Print a copy of the map to submit with your application.

Software requirement:

The Edwards Aquifer Map Viewer has been tested and works fine in the following Web browsers:

- Microsoft Internet Explorer: Version 9 and above
- Mozilla Firefox: Version 21.0 and above
- Google Chrome: Version 30 and above

Please update your Web browsers to the newer version if some tools in the viewer do not work well for you.

The OAS/Information Resources Division (IRD)/Enterprise Support Section (ESS)/GIS Team created and maintains this application.

Date Updated: February 6, 2014

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Navigation Tools

The viewer will open to a full view of the Edwards Aquifer Recharge, Transition, and Contributing Zones.

Basic navigation tools are provided on the left side of the screen.



Pan (Direction) Tool: Click on the arrows to move the map display in the desired direction.

Click on the **Full Extent** (globe) symbol to return to the full view of the Edwards Aquifer zones.



Previous Tool: Click on this button to go back to the previous map view.



Next Tool: Click on this button to return to the view you created before you click on the “Previous” tool.



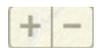
Pan Tool: This tool allows you to pan over the map by dragging the display in any direction with the mouse. To use this tool, move the cursor to any desired location, hold down the left mouse button, and drag the display in any direction. (When you open the map viewer, the cursor defaults to this function.)



Zoom In (Select) Tool: This tool allows you to zoom in on the map to a more detailed view of a selected area. The area displayed is based on the outer boundary of the box that you draw.



Zoom Out (Select) Tool: This tool allows you to zoom out from the area displayed on the map. The area displayed is based on the extent of the box you draw.

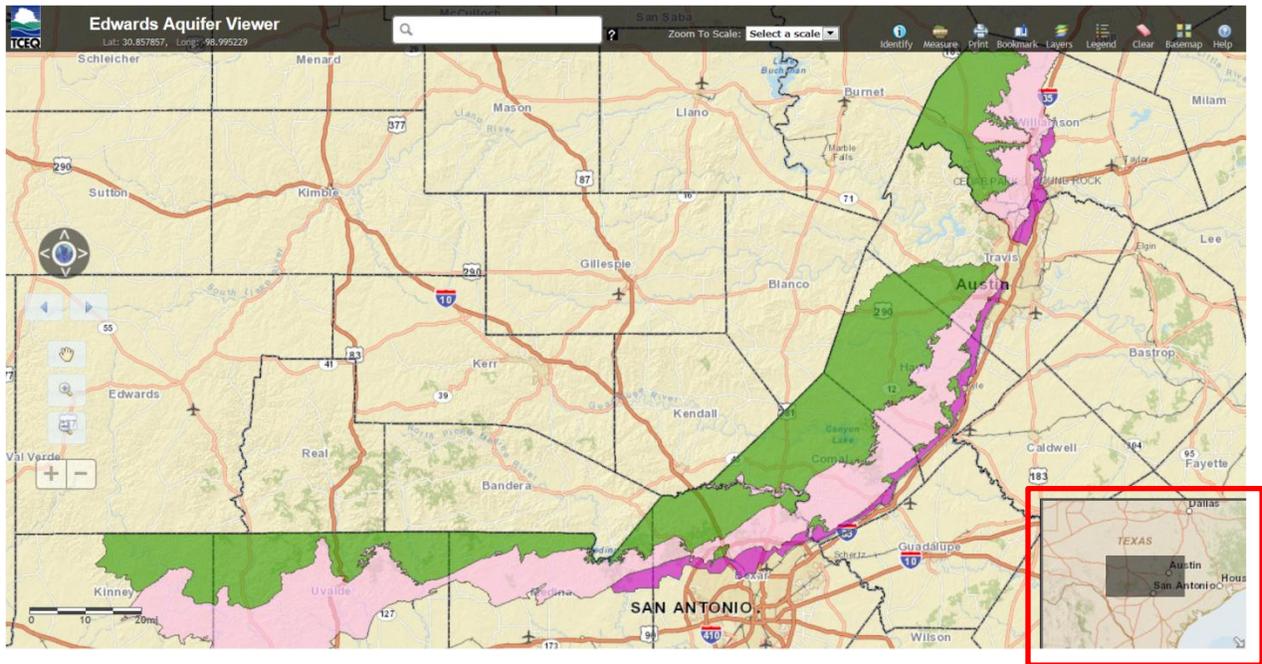


Zoom (Fixed) Tools: Clicking on the plus (+) sign causes the entire view to zoom in for a fixed distance. Clicking on the minus (-) sign causes the entire view to zoom out for a fixed distance. Unlike the **Zoom In/Out (Select) Tools**, you cannot specify the area you wish to zoom in and out of.



Map Extent Window

The Map Extent window is located in the lower right hand corner of the display. It displays a larger geographic area than the viewer display. The grey rectangle in the window corresponds to the area represented in the viewer display.



To change the area shown in the viewer display, click on the grey rectangle and drag it to the area of interest.

You can make the Map Extent Window appear or disappear by toggling on the arrow in the lower right hand side of the window.

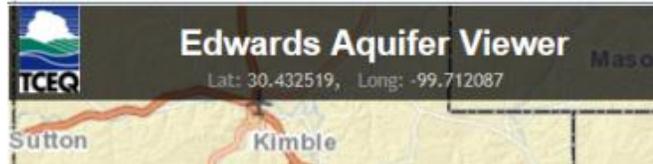
Toolbar



The toolbar at the top of the display offers multiple tools.

Latitude-Longitude Coordinates

On the left side of the tool bar, the geographic coordinates for the location of the cursor are continuously displayed in decimal degrees.



Search Tool

In the left center of the tool bar, the Search tool allows you to zoom to a specific location.



Clicking on the question mark (?) to the right of the search tool window opens the **How to use this Search tool?** Window; the contents are displayed below:

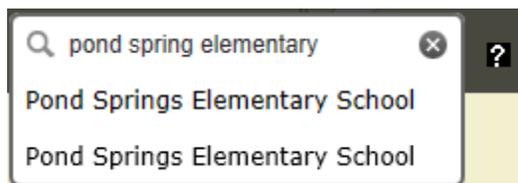
How to use this Search tool?

You can search a location by typing in one of following criteria in the search box (not case-sensitive).

The dropdown list will be auto-completed when you type. [See examples in blue:](#)

Note: the address search function works for the whole country. Therefore, to make the search result to be accurate, please include the city name when you search an intersection or a POI. [Point of Interest]

- Search by **County Name:** [Travis county](#)
- Search by **City Name:** [Austin](#)
- Search by **Address:** [1111 6th St W, Austin, TX, 78703](#)
- Search by **Intersection:** [McNeil Dr & Parmer ln](#)
- Search by **Latitude/longitude:** [-97.2, 30.4](#)
- Search by **POI (Point Of Interest: school, park, mall, hospital, etc.):** [pond springs elementary](#)



After you enter the search criteria, click on the magnifying glass in the left side of the window to execute the search.

When complete, click on the **X** in the right side of the window to clear the search.

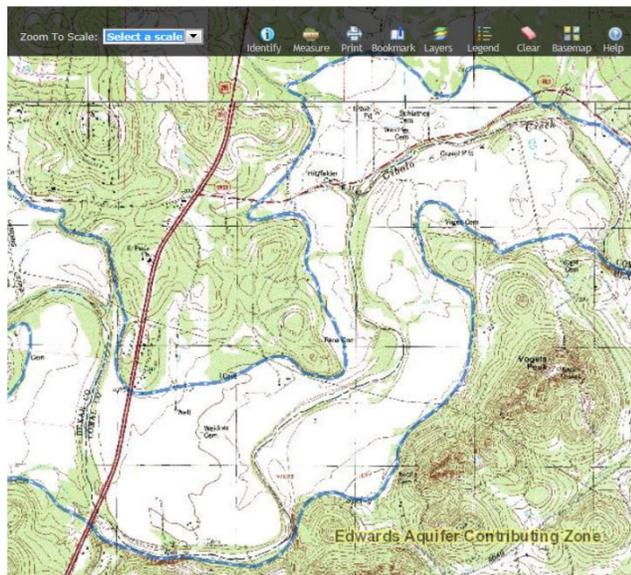
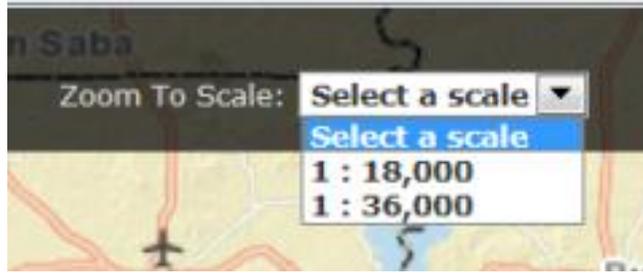
Zoom to Scale

In the right center of the tool bar, the Zoom to Scale feature allows you to specify the scale at which the viewer displays.

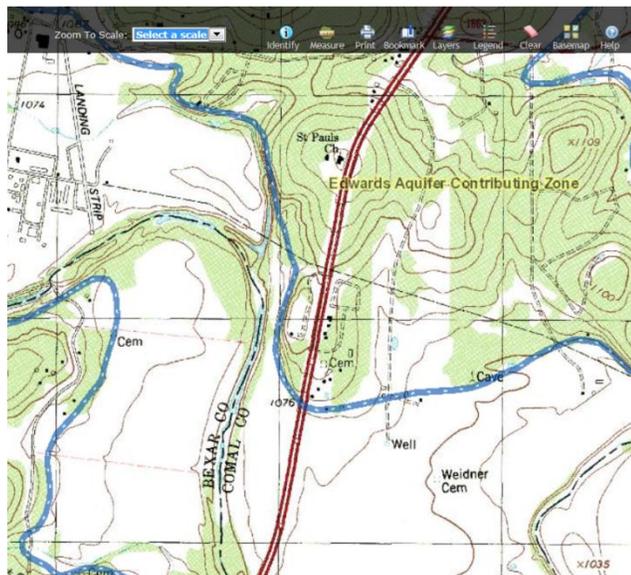
When you click on the drop-down arrow in the **Select a scale** window, you will have two options: **1:18,000** or **1:36,000**.

At either scale, the reference layers in the viewer will disappear and will be replaced by **7.5-Minute USGS Topographic Maps**. The Edwards Aquifer Boundary lines and labels will also display.

The example to the right displays the Bexar and Comal County boundary at 1:36,000 scale.



The example to the right displays the same area at 1:18,000 scale.



Functional Tools

Multiple functional tools are provided on the right side of the tool bar.

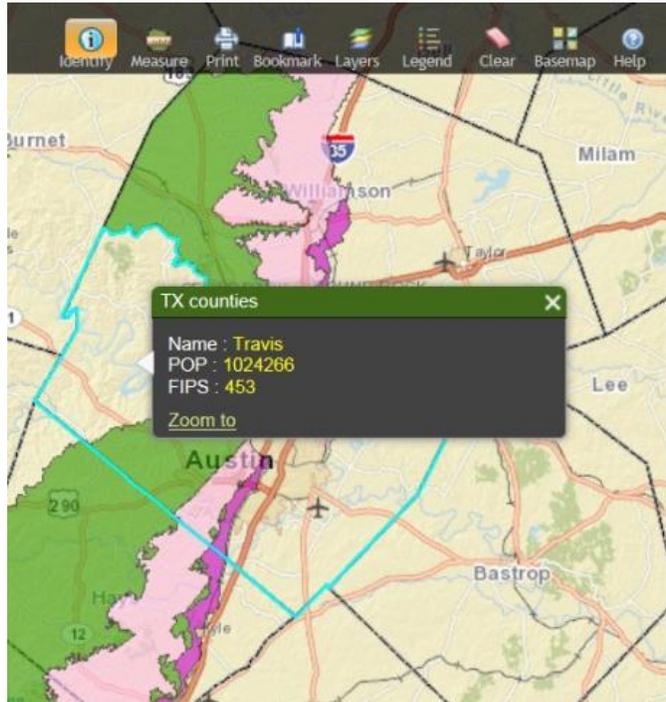


i Identify

This tool allows you to identify visible features on the map. Click on the tool, and then click on the feature you wish to identify. The feature you select will be outlined in light blue, and a pop-up window will appear describing the feature.

In the example to the right, the selected feature is Travis County. The pop-up window displays county name, population, and FIPS code.

If you click on the [Zoom to](#) link, the viewer will zoom to Travis County.



If you click on an area where multiple layers are present (e.g. Counties and Edwards Aquifer Zones), the viewer will highlight the Edwards Aquifer zone.

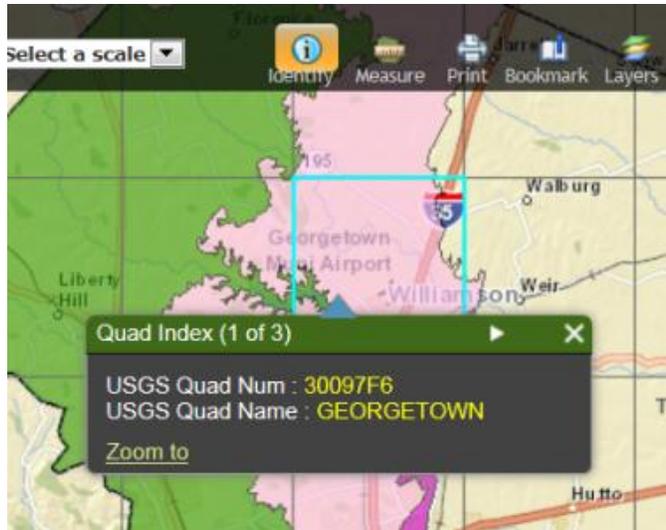
You may also choose to display the information for other underlying layers. To do this, click on the arrow in the pop-up window (highlighted in red in the image to the right).

The viewer will display the underlying layer (in this case, Travis County).



If you zoom in closer than the full view of the Edwards Aquifer Recharge, Transition, and Contributing Zones, the viewer will also display 7.5-Minute USGS Topographic Map Boundaries. Using the identify tool in this case will highlight the quad, with Quad information in the pop-up window.

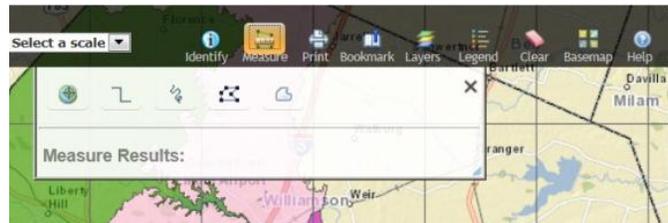
You can display the County and Edwards Aquifer zone information by clicking on the arrow in the pop-up window banner.



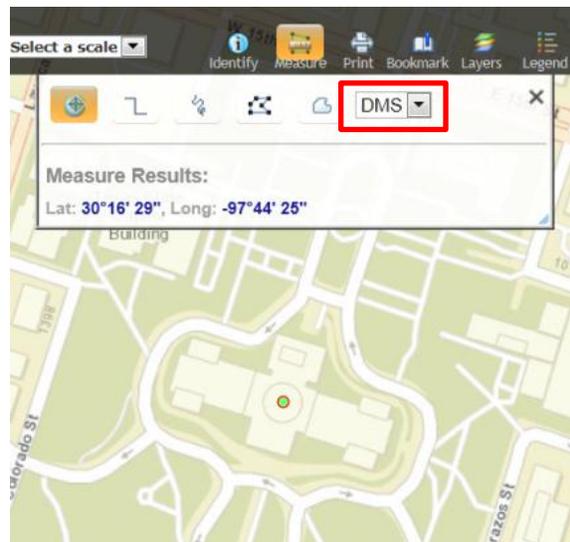
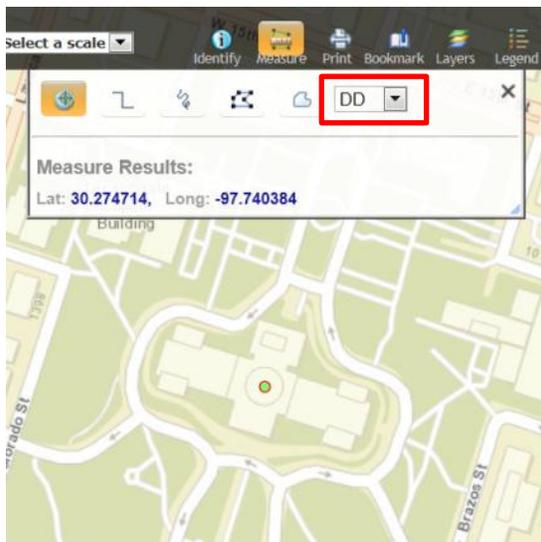
Measure

This tool allows you to obtain latitude-longitude coordinates of point locations or measure distances in the display screen.

Clicking the measure tool displays a window with multiple options for measurement:



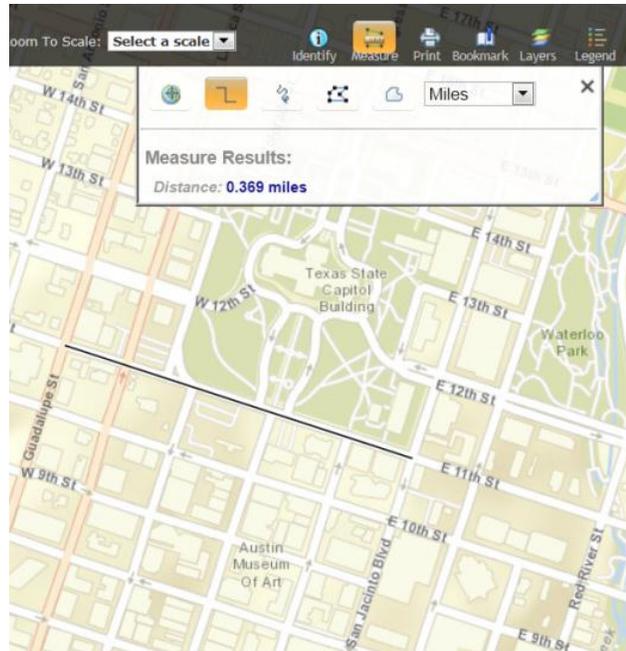
 **Location.** This tool allows you to obtain latitude-longitude coordinates for point locations. You may choose to display latitude-longitude coordinates in decimal degrees (DD) or as degrees-minutes-seconds (DMS).



Measure Distances. Use this tool to measure linear distances between point locations.

In the example to the right, the distance between Guadalupe Street and San Jacinto Boulevard on 11th Street in Austin is 0.369 miles. (You can also measure distances in yards, feet, kilometers, and meters.)

You can measure the distances of multiple connected straight lines. Make a single click at individual points, and do a double click when you're done.



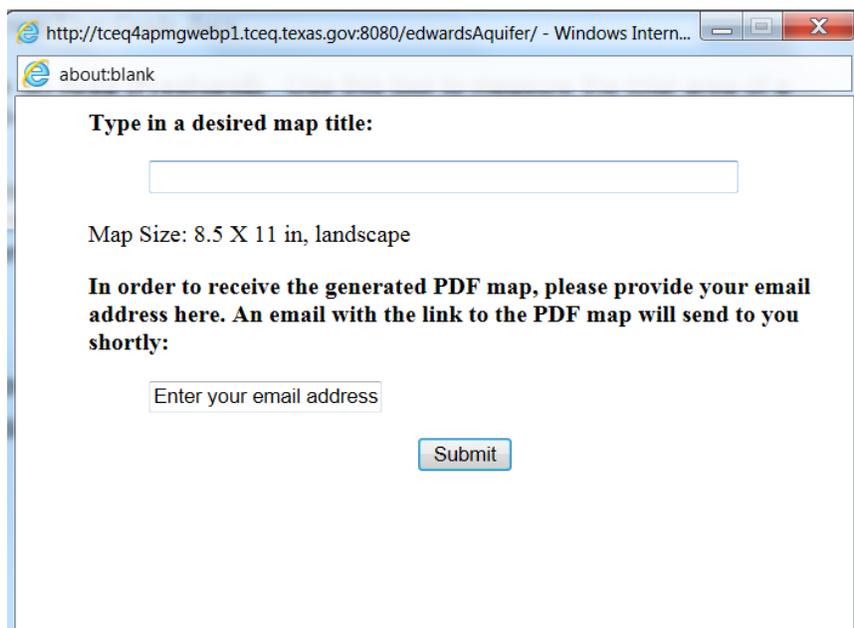
 **Measure an Area (Freehand).** Use this tool to measure the total area of a freehand-drawn polygon (in acres, or square miles, yards, feet, kilometers, or meters).

Note: This tool can only be used to obtain measurements for simple polygons; if you attempt to draw a polygon with too many points, it will not provide a measurement of its area.

Print

This tool allows you to print a map you have created.

When you click on the tool, the following window will appear:



The screenshot shows a web browser window with the following content:

- Address bar: <http://tceq4apmgwebp1.tceq.texas.gov:8080/edwardsAquifer/> - Windows Intern...
- Page title: about:blank
- Form content:
 - Type in a desired map title:**
 -
 - Map Size: 8.5 X 11 in, landscape
 - In order to receive the generated PDF map, please provide your email address here. An email with the link to the PDF map will send to you shortly:**
 -
 -

Enter the map title and your e-mail address in the spaces provided, then click on the **Submit** button.

The viewer will send you an e-mail with the map attached in PDF format.

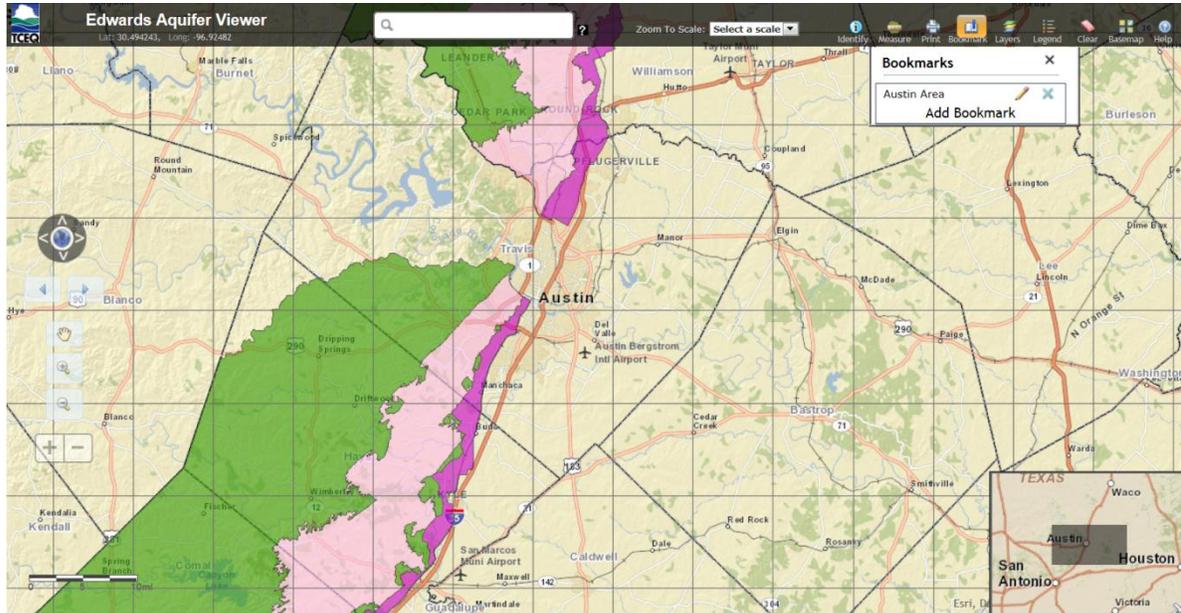
Bookmark

This tool allows you to create bookmarks for specific areas. A bookmark for the Austin area is already in place.

To create a bookmark, zoom to the area of interest and click on the **Add Bookmark** command. Enter the name of the area and hit Enter.

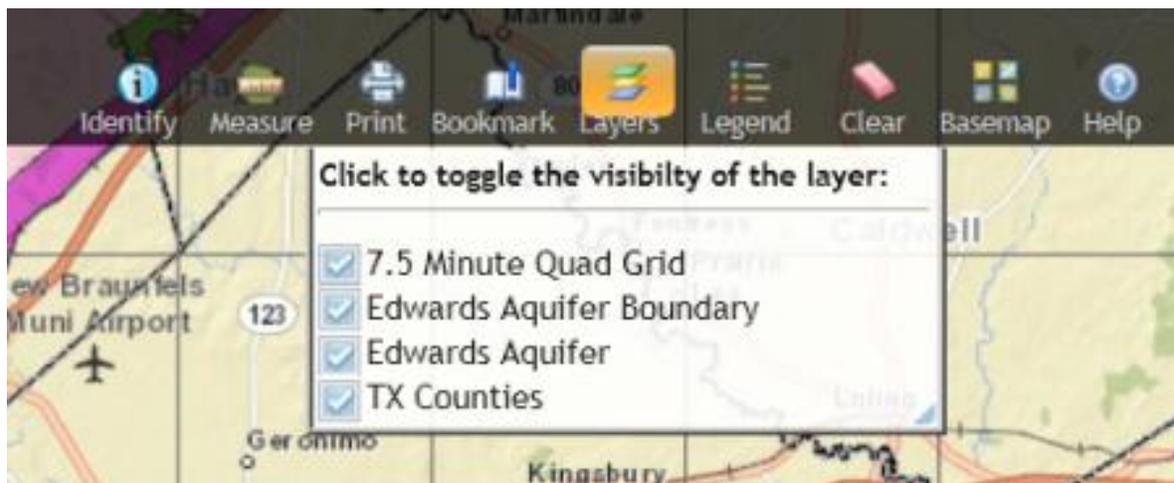
To edit a bookmark, click on the pencil icon and make the desired changes.

To remove a bookmark, click on the blue X.



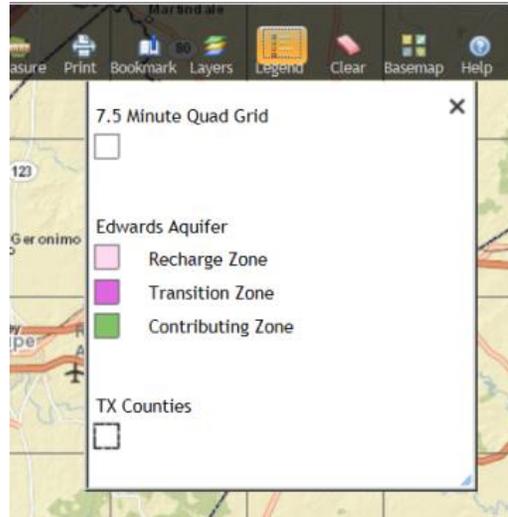
Layers

This tool allows you to choose the layers that the viewer will display. Clicking on the box to the left of the layer name will toggle the layer on or off.



Legend

This tool displays the legend for the Edwards Aquifer Zones, and for 7.5 Minutes Quad Grid and County Boundaries.



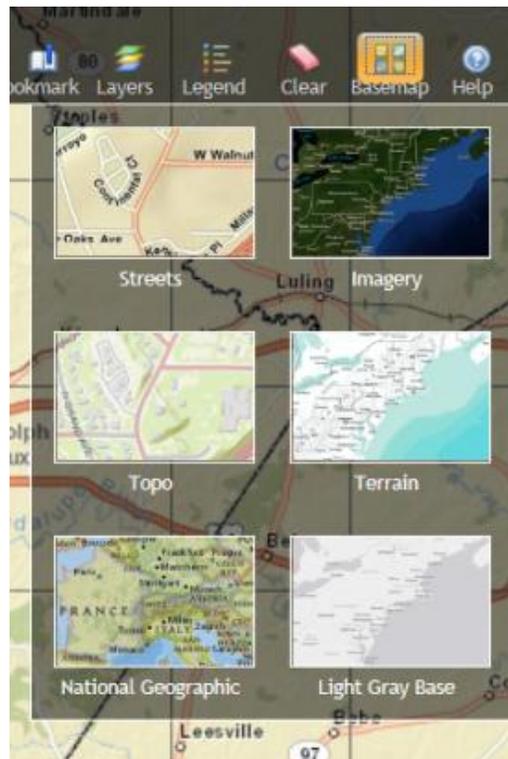
Clear

Most commonly used with the **Measure** tool, clicking on this tool removes all lines and polygons you have drawn on the viewer screen.

Basemap

Clicking on this tool brings up a window that allows you to choose from six different basemap layers:

- Streets
- Imagery
- USGS Topographic Maps
- Terrain
- National Geographic
- Light Gray Base



Help

Clicking on this link brings up a PDF version of this User Guide.