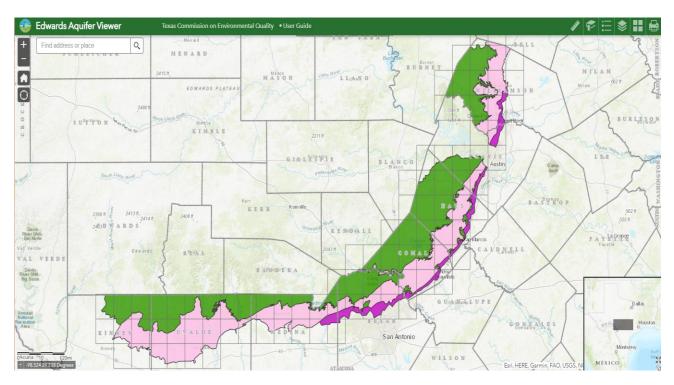
# Edwards Aquifer Viewer User Guide

This GIS interactive map viewer allows users to view the areas of Texas that are subject to regulation by the TCEQ under the Edwards Aquifer Protection Program.



#### **Texas Commission on Environmental Quality**



April 21, 2021

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# Disclaimer

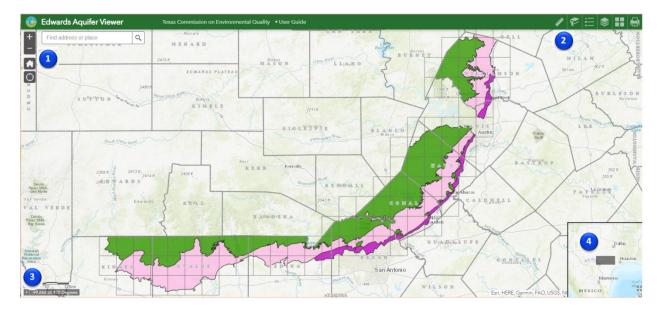
This web application's intent is to show those areas of central Texas regulated by the Texas Commission on Environmental Quality under rules adopted in 30 Texas Administrative Code Chapter 213. The regulatory boundaries identified in 30 Texas Administrative Code Chapter 213 are delineated on 7.5 minute topographic base maps published by the United States Geological Survey that were current at the time of rule adoptions or amendments.

The topographic maps used in this web application are based on the most current maps published by the United States Geological Survey and may not be identical to the topographic base maps used for delineating the regulatory boundaries. Users should consult the actual regulatory maps maintained by the Texas Commission on Environmental Quality and the full metadata related to these boundaries before submitting any plans prepared using this application. We make every effort to provide and maintain accurate, complete, usable, and timely information on our websites, within the limits described in the metadata accompanying this web application. Users are cautioned to consider carefully the limitations of these data and information before using them for decisions that concern personal or public safety or the conduct of business that involves substantial monetary or operational consequences. Conclusions drawn from, or actions undertaken on the basis of, such data and information are the sole responsibility of the user. Neither the Texas Commission on Environmental Quality, the State of Texas, nor any other agency thereof, nor any of their employees, contractors, or subcontractors, make any warranty, express or implied, nor assume any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, nor represent that its use would not infringe on privately owned rights. The topographic maps used in this web application are based on the most current maps published by the United States Geological Survey. Neither the United States Geological Survey, the U.S. Government, nor any other agency thereof, nor any of their employees, contractors, or subcontractors, make any warranty, express or implied, nor assume any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, nor represent that its use would not infringe on privately owned rights. By agreeing with this disclaimer, you, the user, acknowledge that any reliance upon any information shall be at the sole risk of the user The Texas Commission on

Environmental Quality reserves the right, in its sole discretion, to make improvements to, or correct any errors or omissions in, any portion of the site. In no event shall the State of Texas be liable for any direct, indirect, incidental, or consequential damage of any kind whatsoever with respect to the information gathered from this website.

# **Application Overview**

The GIS Web Application allows you to display and save TCEQ Edwards Aquifer map information in different formats. It offers many options for sharing maps with others. The maps can be saved as PDF, JPG, PNG, TIFF, BMP and other image formats. The image below provides an overview of the tools available in this viewer. The user guide is organized into these four basic tool categories:



### 1. Zoom Tools

- 2. Main Toolbar
- 3. Coordinate Indicator
- 4. Inset Map

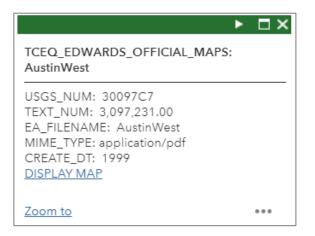
## **Navigating Around the Map**

There are different ways to navigate through the Edwards Aquifer GIS Data Viewer. One of the easiest is to select and highlight map areas you want to display and interact with.

The default view when you open this GIS Application is a state map with the Edwards Aquifer Regulatory Zone layer visible. You can view additional layers, such as the USGS 7.5 Minute Topographic Quadrangles, TCEQ Edwards Aquifer Official Maps, and Texas Counties. You can display the map on different devices like laptops, smartphones, tablets and personal computers.

## **Downloading and Saving the Map**

To download the TCEQ Edwards Aquifer Original Map as a PDF, open it in Adobe Reader, choose a quad area within the aquifer zones, and then click a location to select the map information. A pop-up dialog box will display the map and attribute name of a selected quad.



- Step 1 Click the hyperlinked message "<u>DISPLAY MAP</u>" on the dialog box to retrieve the topographic quad at a selected area on the map. The map image will open in a new window/tab. You can download the map by clicking one of the icons on the top menu.
- 2. Step 2 Click the icon to set the 'save as' type to PDF. Then navigate to the location you would like to save the PDF to and enter a name for the PDF. Hint: *If*

the icon isn't there, **right click and select Save as** ...Optionally, select a format for the map output file. In the resulting dialog, you can save or send the map file to another destination.

# Zoom Tools



**± 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 Texas (default extent).

**My Location** – Clicking this button will allow you to detect your current location and zoom in on it.

Search Bar – This button allows you to search for an address, location, or designated place into the bar. 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 enter a specific location or partial address, and then either press "Enter" on the keyboard or click the magnifying glass. You can click the "X" on the bar to exit or clear out the search bar.

Find address or place

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

- Street address: 100 Congress Ave, Austin, TX, 78701
- Designated place: Zilker Park,

• City or County name: San Antonio, Bexar

#### **Main Toolbar**



- The Measure tool enables the user to measure point, linear, and area features on the map.
- To measure a feature, click on the Measure lool on the main toolbar.



• The Measure window will appear as shown below.

Measurement				>	ĸ
	€.) 1000				
			Measurement Result		

- To close the window, click the  $\times$  in the upper right-hand corner. To collapse the window, click the  $\wedge$  just to the left of the close button.
- There are <u>three</u> different ways to measure features on the map:
  - Area Click this button, choose a unit of measure from the dropdown list, and then 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 Measure window.
  - Distance Click this button, choose a unit of measure 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 yourlinear feature. Double-click to end. Results will appear in the Measure window.

Location - Click this button, choose a unit of measure from the drop-down list, next click a point on the map then move the mouse across the map. Result will display the coordinates for both the greenindicator and cursor.

#### Bookmarks

- The Bookmark tool can be used to save or view a particular map extent (or zoom area). For instance, you may wish to zoom to a particular block or neighborhood, then create a bookmark to save thatextent (view of the map) to revisit later.
- To **view** a bookmark, click on the Bookmark tool 🗹 in the main toolbar.



- To **create** a bookmark, click on the Bookmark tool *for a create*, then click the Add button. The new bookmark will be added with the name 'bookmark'.You can click on the new bookmark name to rename it.
- To **delete** a bookmark, click on the Bookmark tool *Solution*, then hover your mouse over the bookmark to delete. This will reveal the X icon which you can click to delete the bookmark.
- To close the window, click the in the upper right-hand corner.
  Tocollapse the window, click the just to the left of the close button.





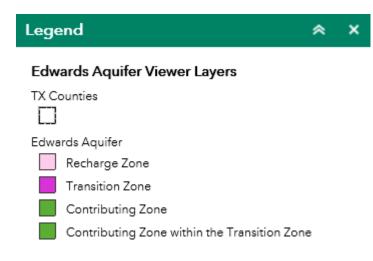
• The Legend tool shows the map symbology for the selected

layers that are set using the layers tool.

• Simply click the **Legend** button to display the list of items that may display on the map. As you zoom in, more items display in the list and can be seen on the map.



- To close the window, click the in the upper right-hand corner.
  Tocollapse 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.



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### Layer List

Allows you to toggle between the available layers.

 The Layers tool can be used to turn on and off data layers. It provides the visibility you want to display on the map. For example, to display Stream Segments on the map, click the Streams check box.

Simply click the **Layers** button in the main tool bar to explore the options, then check or uncheck the data items or features you would like to see.

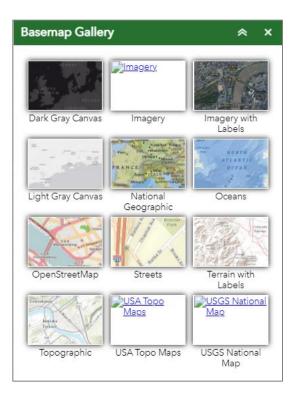


- To close the window, click the  $\times$  in the upper right-hand corner. To collapse the window, click the  $\approx$  just to the left of the close button.
- Expand the layer by clicking the small arrow to the left of the check box. Here you can see the layer symbology.
- Click the three dots to the right to set the layer transparency and drawing order.

### Basemap

- The Switch **Basemap** tool can be used to change the background in the mapviewer. By default, the topographic basemap is selected.
- To change the basemap, click on the Basemap tool III on the main toolbar, then select the basemap you wish to use.





- To close the window, click the in the upper right-hand corner. To collapse the window, click the sjust to the left of the close button.
- You may choose from twelve different basemaps. Note: Some basemaps(such as Open Streetmap) are not visible when zoomed in too close.



### Print

• Use the **Print** tool **I** to save the current map to an image file. You maygive it a customized title, select a layout and size, and format. Advanced features include ability to set map scale, pixel dimensions, and DPI.

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3		
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# **Coordinate Indicator:**



- Click this tool, then click anywhere on the map to obtain the coordinates in decimal degrees.
- The tool will also show the coordinates of your current mouse position over the map.

### **Inset Map**



This allows you to see an overview of the area you are viewing on the map.

- Click and drag the gray box to reposition the main map.
- Click the four-arrow box to zoom out to the world map or to restore theprevious extent
- To close the overview map, click the white arrow in the bottom right corner.

# **Contact Us**

E-mail Edwards Aquifer Protection Program staff at eapp@tceq.texas.gov or talk with EAPP Staff in the TCEQ Austin Regional Office at 512/339-2929 or the San Antonio Regional Office at 210/490-3096.