The **Integrated Water Utilities Database (iWUD) Map Viewer** allows users to view water and sewer service boundaries of retail utilities and districts in Texas. The viewer provides search tools and bi-directional flow tools that link it to the Integrated Water Utilities Database (iWUD). These tools allow users to determine if there is an existing retail utility or district service provider for a particular area.

A retail public utility must obtain a Certificate of Convenience and Necessity (CCN) from the TCEQ, so they are authorized to provide retail water and/or sewer service to a specific area. The CCN obligates the water or sewer retail public utility to provide continuous and adequate service to every customer who requests service in that area. The maps and data shown within the iWUD Viewer designate the CCN service area(s) or facility line(s).

A district is a political subdivision whose boundaries are described by a TCEQ order or legislative bill creating the district. A district may not provide retail water or sewer service within an area for which another utility holds a CCN, unless the district has a CCN to provide services to that area.

You can use the iWUD Map Viewer to do the following:

1. Access current retail water and sewer utility and district service provider data.
2. View, print, and download CCN and district service boundaries.
3. Search for retail utility and/or district service provider(s) by a selected CCN number, water district number, city, county, zip code, address, intersection, and latitude/longitude.

4. Obtain more details about a CCN or district by using tools linking to iWUD.

**Software requirement:**

The Water Utilities 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. The Water Supply Division (WSD)/Utilities & Districts (UD) Section/Utilities Financial Review (UFR) Team edits and updates their program area data, including CCN service areas, CCN facility lines and district service boundaries in ArcGIS.

**Date Updated:** February 6, 2014
# Table of Contents

Navigation Tools ................................................................. 4  
Map Extent Window ......................................................... 5  
Toolbar ........................................................................ 5  
  Latitude-Longitude Coordinates ..................................... 5  
Search Tool ................................................................. 6  
Functional Tools ........................................................... 7  
  Search .................................................................... 7  
  Buffer ................................................................... 8  
  Identify ................................................................. 10  
  Utility ................................................................... 11  
  District ................................................................. 12  
  Measure ............................................................... 14  
  Bookmark ........................................................... 16  
  Layers .................................................................. 17  
  Legend .................................................................. 17  
  Clear ................................................................. 17  
  Print .................................................................. 18  
  Basemap ............................................................ 19  
  More ................................................................. 20
Navigation Tools
The viewer will open to a full view of the state of Texas.

(As you zoom in to the map, the following features will display:

- Sewer CCN Facility Lines
- Sewer CCN Service Areas
- Water CCN Facility Lines
- Water CCN Service Areas

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 state of Texas.

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 corner 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 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, OR select the auto-populated address, intersection, etc. below the search criteria you entered to execute the search.

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

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

**Search**

This tool allows you to search for a specific CCN or District.

Clicking on this tool displays a **Search by CCN or District** window.

To make a search by **CCN**:

1. Select the CCN Type from the **CCN#** dropdown menu.
2. Enter the CCN Number in the space provided. (The CCN number must be a 5-digit number.)
3. Click on the **Find CCN** button.

For example, searching for a Water Service Area with a CCN Number of 11728 will yield the results displayed to the right:
To make a search by **District**:

1. Enter the District Number in the space provided. (The District Number must be a 7-digit number.)

2. Click on the **Find Water District** button.

For example, searching for a district with a District Number of 1175000 will yield the results displayed to the right:

### Buffer

This tool allows you to create a buffer around the layer you select, and to display a list of CCNs that fall within the buffered distance.

Clicking on this tool displays a window in which you can select the layer (either **Water CCN Service Areas** or **Sewer CCN Service Areas**) and set the buffer distance.

To display either **Water or Sewer CCN Service Areas**:

- First, zoom in to the area of interest. Both **Water and Sewer CCN Facility Lines and Service Areas** will display.
- Select the layer from the dropdown menu and enter the buffer distance you want.
- Finally, click on the desired feature to create a buffer around it.
In the example below, a three-mile buffer has been drawn around Water CCN Service Area 11157. Only one Water CCN Service Area falls within that buffer: La Tierra WSC (CCN Number 12235).
Identify

This tool allows you to identify visible features on the map.
Clicking on the tool displays a menu of layers you can identify.
After you select the layer, click on the map.
The viewer will highlight the feature (point, line, or polygon) in light blue and will display an information window about the feature.
The example below displays information about TCEQ Region 11.
Utility

This tool allows you to access specific records for either the **Water CCN Facility Lines/Service Areas** or **Sewer CCN Facility Lines/Service Areas**.

To use this tool, you must first use the **Layers** dropdown menu (described on page 17) to display **Water CCN Facility Lines/Service Areas** and **Sewer CCN Facility Lines/Service Areas**.

You may then use the **Zoom In** tool to zoom in to the area of interest until the **Water and Sewer CCN Facility Line/Service Area** layers appear on the viewer.

You may then use the **Utility** tool to specify the layer of interest, and do a left mouse click on a specific line or area to get details about the utility.

In the example to the right, clicking on the Sewer CCN Facility Lines/Service Area for the City of Galveston (CCN Number 20519) displays details about the utility in a separate web page located in the Internet version of the Water Utilities Database (iWUD).
District

This tool allows you to access specific records for different types of retail water and sewer districts.

To use this tool, you must first use the Layers dropdown menu (described on page 17) to display the type of district you’re interested in.

You must then zoom in to the area of interest until the districts appear on the viewer.

Next, use the District tool to specify the district you’re interested in, and do a left mouse click on the specific district to display additional information about it.

In the example to the right, we have selected Municipal Utility District (MUD) as the layer to display and have zoomed in to the town of Early, Texas.
The next step is to go to the District tool and select the Municipal Utility District (MUD) from the dropdown menu.

Finally, do a left mouse click on Early MUD to get details about this district, which is displayed in a separate web page located in iWUD.
**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.
Freehand. Use this tool to measure distances between two points that do not fall on a straight line.

In the example to the right, the distance between South Congress Avenue and Interstate Highway 35 on Lady Bird Lake in Austin is 1,583.08 meters.

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

In the example below, Hemisfair Park in San Antonio has a total area of 116.785 acres and a perimeter of 3049.770 meters.
**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.

**Bookmark**

This tool allows you to create bookmarks for specific areas of interest, so you may return to the area of interest after you have closed the viewer. A bookmark for the Austin area is already in place (displayed below).

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.

(When you open the viewer, the Water CCN Facility Lines/Areas and Sewer CCN Facility Lines/Areas layers will already be selected.)

Note that different layers will become visible at different scales. If you select a layer but it does not display on the viewer, you may need to zoom in to a larger scale (displaying a smaller geographic area) before the layer appears.

Legend

Clicking on this tool will display the symbols for the layers you chose to display using the Layers tool.

If you have selected no layers, or if you are viewing the map at a scale in which the layer does not display, clicking on the Legend tool will display an empty screen with the heading “No legend”.

Clear

Most commonly used with the Measure tool, this tool removes all lines and polygons you have drawn on the viewer screen. Also, the Clear tool may be used to remove the results of using a tool, such as the Buffer tool.
Print

This tool allows you to print a map you have displayed in the viewer screen. When you click on the tool, the following window will appear:

Enter the map **Title** and your **Email** address in the spaces provided, select the template, and click on the **Get Map in PDF** button. The viewer will send you an e-mail with the map attached in PDF format.
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
- Light Gray Base
- OpenStreetMap
More

Clicking on the More arrow opens a new window with four different links:

- **Submit form** opens a window with a form for requesting information on water or sewer utility providers for a specified piece of property.

- **Download Spatial Data** opens a window that initiates the download of CCN Spatial Data or District Spatial Data.

- **Contact us** opens an e-mail to: utildist@tceq.texas.gov

- **Help** opens a PDF copy of this User Guide.