We|STROM

Well and Septic Tank Referencing and Online Mapping

WELSTROM

CHEMICAL HAZARDS

PUBLIC FACILITIES

sgrc
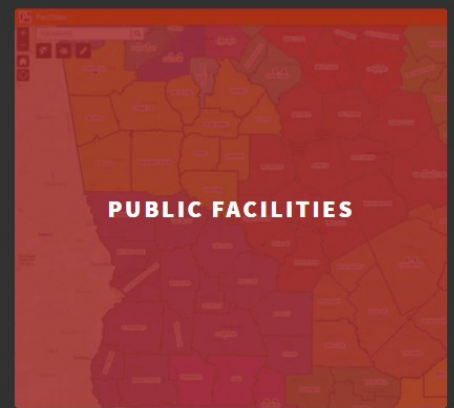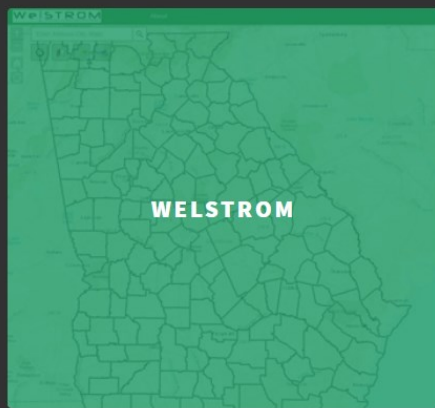
SOUTHERN GEORGIA
REGIONAL COMMISSION

Welcome to the Well and Septic Tank Reference to the Online Mapping Website

The mission of the WelSTROM project is to provide a web-based method for the capture of private well and sewage treatment installations data that enables the query, reporting and mapping of these installations. This application is an aggregation of data from multiple sources and/or agencies participating in WelSTROM projects. As a result, certain map layers may not cover the complete extent of Georgia. For more information, or to sponsor expanding the scope of a data layer, users can email Chris Strom (cstrom@sgrc.us) or Rachel Strom (rstrom@sgrc.us) at the Southern Georgia Regional Commission.

The preparation of this web site was financed in part through a grant from the U.S. Environmental Protection Agency under the Provisions of Section 319(h) of the Federal Water Pollution Control Act, as amended, and the State of Georgia Department of Natural Resources. Georgia Department of Public Health provided funding for the ongoing maintenance of this website.

The data supplied to the WelSTROM system is from the database maintained by the Georgia Department of Public Health. This data is compiled by the 155 counties using the Environmental Health System (EHIS) for their operations. DPH supports general public consumption of the data and graphics supplied by the SGRC, but any data request beyond the capabilities of the WelSTROM system must be directed to DPH via the Public Health Information Portal (PHIP - https://dph.georgia.gov/phip-data-request).

Contents

How to use the WelSTROM Mapping Application Widgets

https://www.welstrom.com/welstromapp/index.html
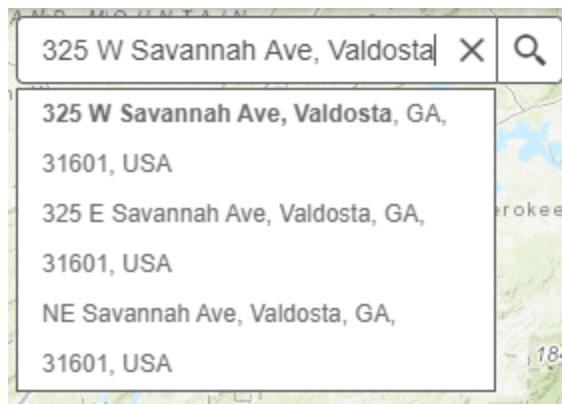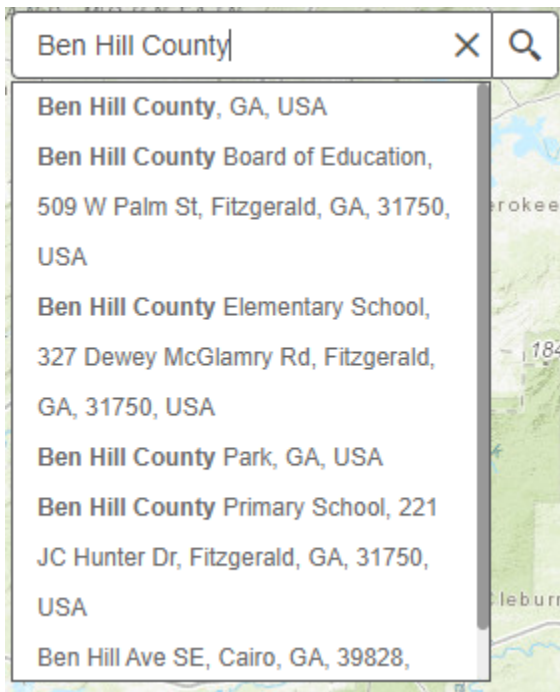
## Address and County Search

Type out the Full Address or County Name.

Examples: 123 Something St   Ben Hill County (Make sure to add "County" beside the name)
          City, State Zip   Fulton County

1. Suggestions will appear below Search bar. See Figures A and B

2. When the suggestions appear, you can hover your mouse over that suggestion and it will highlight. Then click the highlighted suggestion and the application will zoom to your selection.
3. Click the "x" to clear the selection in preparation for the next new search.
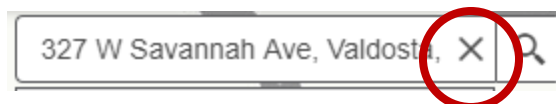
Query Data Widget

The Query Data widget allows you to retrieve information from layers in the map by executing a predefined query. Each query works with a single layer.

To open the Query Data widget, just click on the "G" button. After the Query Data window opens you will be given a list of selections.

The first option is to "Select County (Step 1)". The next 2 searches, "Select Septic in selected County" or "Select Wells in selected County", are used after following through using the "Select County" search.
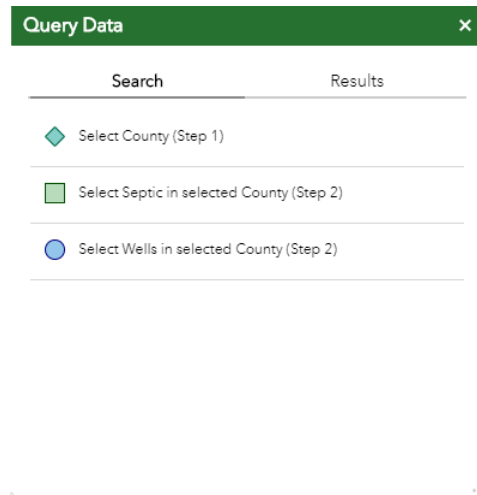
1. After clicking "Select County" from the drop-down arrow, choose a county.
2. In the "Result layer name" text box, Name your result to something meaningful to you.
3. Then click the Apply button.
4. The map will zoom to your selected county and the Results tab is open displaying your selection.
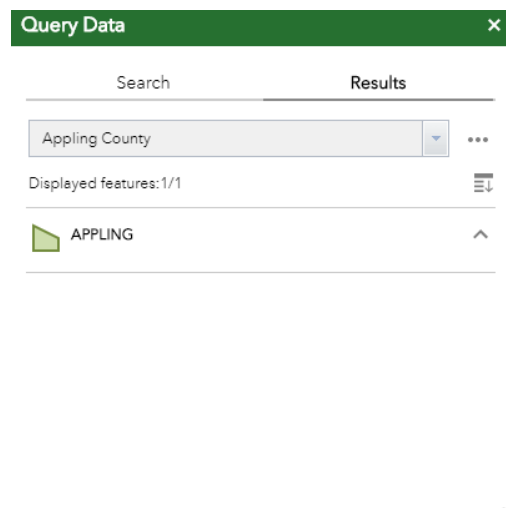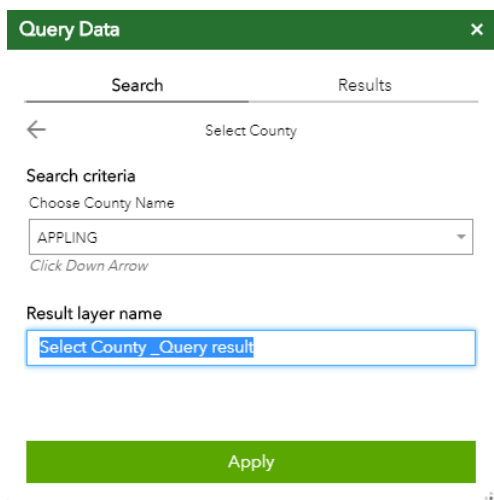
5. The ellipsis (…) in-line with your Result layer name will open up additional selection actions.
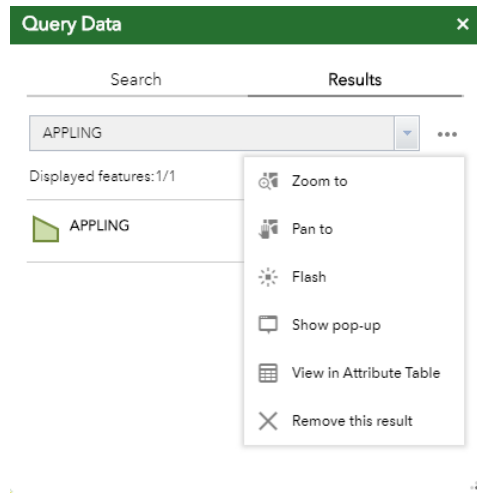
6. When you are ready to "Select Septic in selected County" or "Select Wells in selected County", Click the Search tab, and then the Arrow.
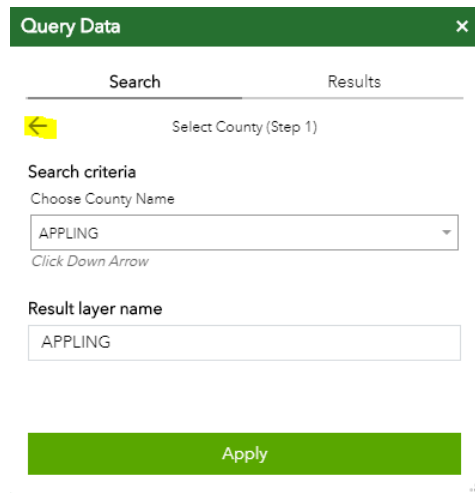
7. Then click on "Select Septic in selected County" or "Select Wells in selected County". You will use these next steps for both of these selections.
8. The new Search criteria comes up. In the text box titled "Related Layer", choose the Layer Name you created in the county selection.

9. Then click the apply button.

10. When all the septic or well sites in the county are selected, the selections will display in the results tab.

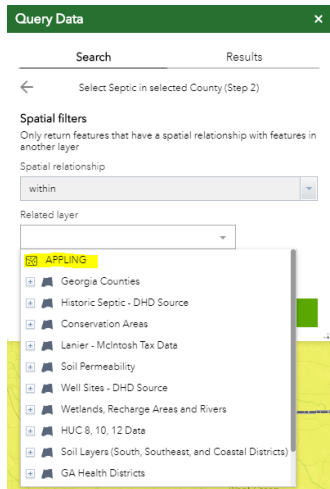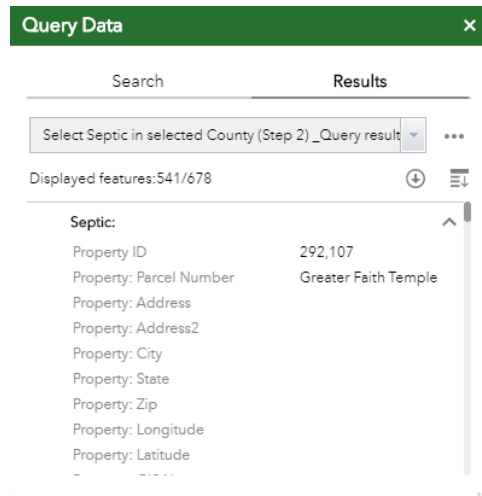11. Notice in the image above that displayed features are only 541/678. That means that 541 records of the total selected 678 are displaying in the Results tab. To add the additional records, click on the down arrow with the circle around it. You may have to do this more than once before you can see all of the records.
12. You are able to scroll through the selected records. If you click one of the records in the result list, the map will zoom to that particular feature.
13. To clear the results, click the ellipses (…) and then click "Remove this result".

Bookmark Widget

The Bookmark widget stores map view extents. If there is an area in the map you zoom to frequently, you can add that extent as a "bookmark". The bookmarks are saved to your web browser's cache and cannot be seen by other users. If you clear your internet cache, your added bookmarks will be removed. The layer visibility settings are also saved when creating bookmarks.

How to add a bookmark:

1. Add bookmarks by zooming to your desired location and click the "Add" button.
2. Hover over the new bookmark and click in the blue text box area to give it a name.
3. You can change the order of the bookmarks by hovering over the bookmark that you want to move and then clicking and dragging the bookmarks to the desired order.

To close the widget, click the "x" in the top righthand corner.

Measurement Widget

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

When drawing the polygon, line, or point you can press the CTRL button to enable snapping to features in the map. To close the widget, click the "x" in the top righthand corner.

Find Coordinates of a Point:

1. Click on the Location button.
2. Then click a location on the   map. The Measurement widget will display the coordinates for the point in degrees (decimal). To change the coordinate display to a different format to degrees/minutes/seconds, change the selection in the "Degrees" dropdown menu to DMS.
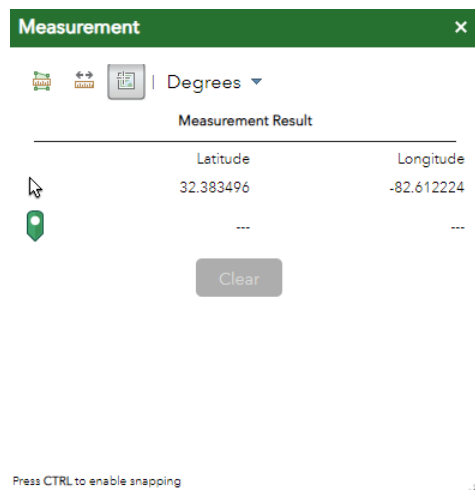
Distance Measurements:

1. Click the Distance button.
2. Draw a line by clicking once for a beginning point and for each end of each segment.

3. Double-click to finish drawing the line. The Measure widget displays the total length of the line using the defined unit of measurement. You can change the length unit by selecting a different unit of measurement from the "Miles" drop-down menu.
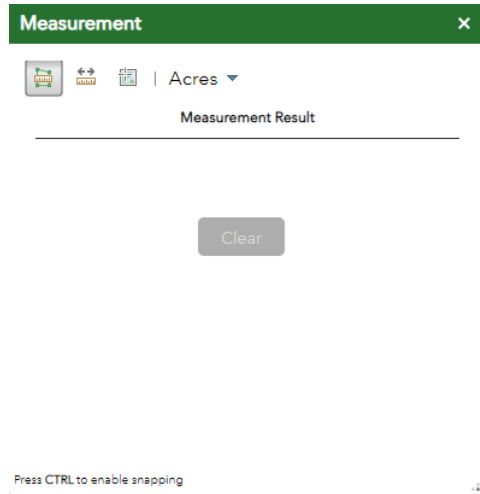
Area Measurement:

1. Click the Area button.
2. Draw a polygon on the map by clicking once for each point of the polygon.
3. Double-click to finish drawing the polygon. The Measurement widget displays the total area of the polygon using the defined area of unit. To change the area unit of measure, select a different unit of measure from the Acres drop-down menu.
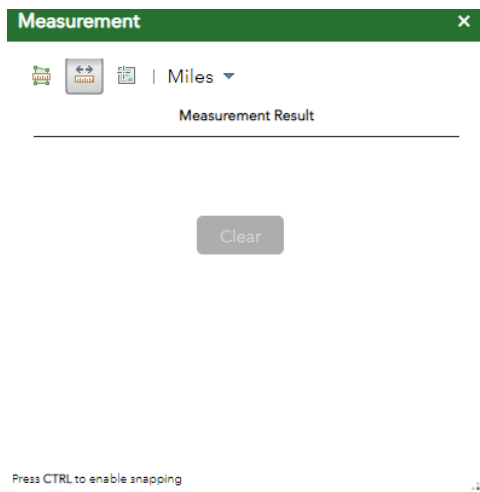
Mark Up Widget

The Mark Up widget allows you to draw simple graphics and text on the map. It will also add line distances and polygon areas to your drawn graphics as text. When the widget is open, the following drawing tools (or draw mode) are available:

Point, Line, Polyline, Freehand polyline, Arrow, Triangle
Rectangle, circle, ellipse, polygon, freehand polygon and text.
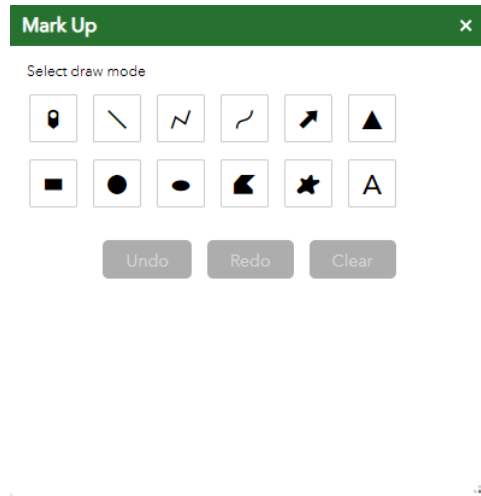
1. To get started with the Mark Up widget, click a draw mode button.
2. Different style options appear to customize how the mark will look: font, size, color, etc.
   A. For points: select the symbol, symbol size, color, transparency, outline color, and outline width. Also turn on or off the "Show location measurement".
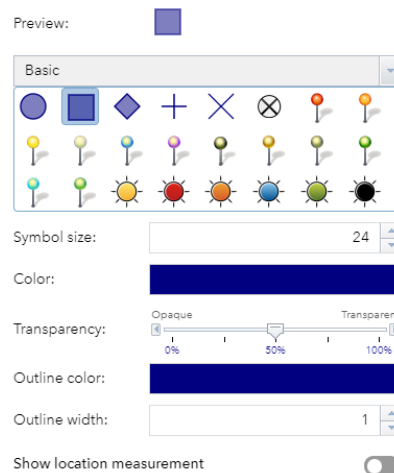
B. For Lines: select the symbol, color, style, transparency, and width. Also turn on or off the "Show location measurement".

c. For Polygons: select the symbol, color, transparency, outline color, and outline width. Also turn on or off the "Show location measurement" or the "Show perimeter measurement".
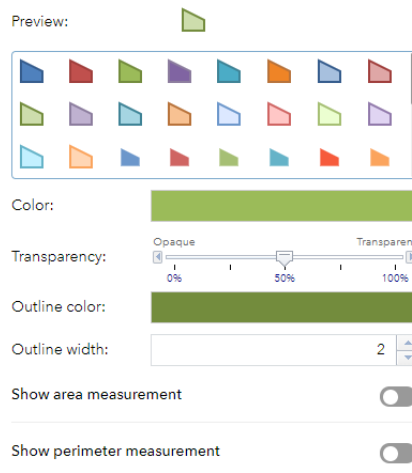
D. For Text: Type the text in the text box and select the font color and size.

Preview:

Text: [   ]

Font color: [■■■■■■■■■■■■]

Font size: [20 ▲▼]

[Undo] [Redo] [Clear]

3. Draw the desired feature or text on the map
4. Click Undo or Redo to cancel or repeat your drawings, or click Clear to remove them all from the map.
5. To close the widget, click the "x" in the top righthand corner.

Select Layers by Graphic Widget

The Select widget enables you to interactively select features on the map and take actions on the selected features. Some of those actions include:

- **Zoom to**: zooms to selected features
- **Pan to**: pans the map to selected features
- **Statistics** : summarizes a numeric field
- **Create Layer**: creates a layer from selected features
- **Show related records**: shows related records
- **View in Attribute Table**: shows selected features in a tabular form
- **Clear Selection**: clears the selection set.

Selection actions   ✕

⊙ Zoom to

Pan to

Σ Statistics...

Create layer

Show related records

View in Attribute Table

Clear selection

To use Select Layer by Graphic:

1. Click the Select Layers by Graphic widget icon.
2. Choose the layer or layers you want to select by checking the box. You can also make all layers selectable or de-selectable, or toggle layers select ability by clicking the button at the upper-right corner of the panel, in-line with Layer. It looks like 3 lines with a checkmark.

Select Layers By Graphic   ✕

[⊠ Select ▼]   [Clear]

Layer   ≡✓

   ☑ Select by point
   ☑ Septi   Select by rectangle   0 •••
   ☐ Well   Select by polygon   0 •••
   ☐ Septi   Select by circle   s)   0 •••
   ☐ Facili Select by line   0 •••
   ☐ Prope   Select by lasso   0 •••
   ☐ Parcel Availability   0 •••
   ☐ Parcel Boundary   0 •••
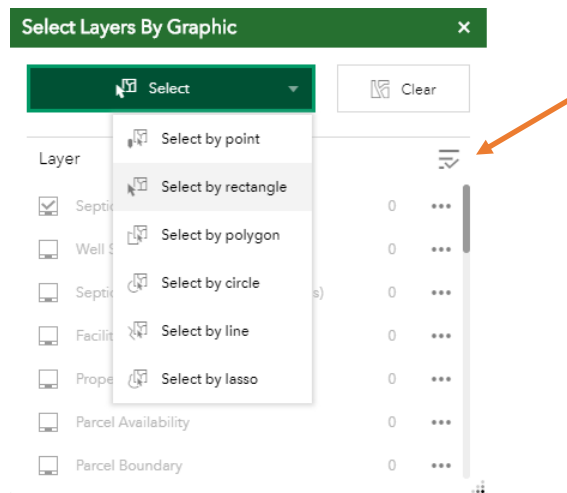
3. Hover over the Select button and choose graphic selection: by point, rectangle, polygon, circle, line, or lasso.

4. Drag the point on the map to create a new selection.
5. Press the Shift Key while dragging the pointer on the map to add selected features to a selection.
6. Press the Ctrl key while dragging the pointer on the map to remove selected features from the selection.
7. The number of selected features displays next to the layer.
8. Hover over the layer that has selected features, the layer will highlight, then click on layer. A new window appears showing only the selected features.
9. Click the ellipsis (…) to open the Selection Actions menu.
10. When done with selected features, click the Back Button to return to the main panel. ←
11. Click the Clear button to clear all selections.

To close the widget, click the "x" in the top righthand corner.

Print Button Widget

Click the Print button to open the Print Widget. Type a title for the map in the Map Title text box. Select the applicable Layout and Format for the exported map. The MAP_ONLY format prints only the map, omitting any marginal information from the output. The landscape view is wider than it is tall. The portrait view is just like a piece of paper, taller than it is wide. The last dropdown is Format - this lets you choose the format you'd like for the map. By default, it is a PDF but you can choose among several different outputs.

Click **Advanced** to open a menu with advanced print options.

- **Map scale/extent** defines the method that the print service uses to calculate the printed extend of the map. Preserving **map scale** causes the printed map to maintain its scale while recalculating the extent around the existing center point. Preserving **map extent** causes the scale to adjust to fit the current map extend onto the printed map. You can force a specific scale by clicking **Force scale** option and providing a scale. Click **current** to populate the value with the present scale of the map.
- **Output spatial reference WKID** defines the output spatial references of the print by specifying a valid well-known ID ([WKID]).
- **Layout metadata** allows you to override the default values set in the configuration. Specify values for the **Author** and **Copyright** properties to provide current information to the print service. Check the **Include legend** check box to display the legend on the printed map.
- **MAP_ONLY size** – If you select the Map_Only format, you can provide dimensions for the **Width** and **Height** properties in pixels. Otherwise, these values are ignored.
- **Print quality** – Allows you to update the resolution of the printed map. Provide an updated value for the **DPI** (dots per inch) in the text box.
- **Feature attributes** – If **Include attributes** is checked, the feature's attributes are included in feature collection layers. This is only applicable to custom print services that use the feature attributes, for example, to display a table of features and their attributes.

All of the values in the **Advanced** dialog box can be left as is. After all options have been set with the applicable values, click Print to submit all information to the print service.

A progress bar displays next to the executing task. Upon completion of the print job, a link to the print output displays.

1. 📄 WelSTROM

🧹 Clear prints

Click the task (in this case WelSTROM) to open the file in a new window. Click **Clear prints** to clear the print history.

Legend Widget

Click the legend button to display the **Legend** window. The legend window displays labels and symbols for layers in the map. Clicking the "x" in the upper right corner of the **Legend** window closes it.

Layer List Widget

This is the **Layer List** button. Click the button to display the layer list or table of contents window. Click the down arrow next to an individual layer to show its symbol.

▾ ☑ HUC 8, 10, 12 Data   ●●●

  ▾ ☑ HUC 8   ●●●

     ▢
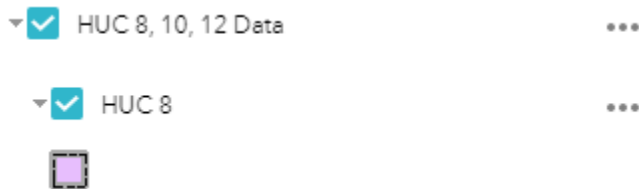
Left-click the three dots on the right side of a layer to display the layer menu with the following options:

- **Zoom To** – Sets the map extent to the extent of the layer.
- **Transparency** – Sets the transparency for the layer.
- **Set visibility range** – Sets the scale for when the layer is visible.
- **Enable Pop-up/Remove Pop-up** – Enables or disables the pop-up for the feature layer.
- **Move up** – Moves the layer one level up.
- **Move down** – Moves the layer one level down.
- **View in Attribute Table** – Opens the attribute table for the feature layer.
- **Description** – Opens the service description or the item details page for the service or the item associated with the layer.

Click the **Control All Layers** button ▽ to control the behavior of the layers in the list. You can turn the layers on or off, and expand or collapse the layers. Alternatively, you can use keyboard shortcuts to do the same. Press Ctrl and check the layer check box to turn the layers on or off in the same level. Press Ctrl and click the arrow to expand or collapse layers in the same level.

Click the Search button $\mathbb{Q}$ to find / search for a layer.

Layers in the list are unavailable when zoomed out beyond their visible range.

Clicking the "x" in the upper right corner of the **Layer List** window closes it.

Basemap Gallery Widget

Click the button to display all available basemaps. The basemap is the underlying layers being displayed. Clicking a basemap thumbnail sets it as the active basemap for the app. Click the "x" in the upper right corner of the Basemap Gallery window to close it.

Near Me Widget

This widget allows you to find features within a distance of a defined address or location and to view detailed information about those features.
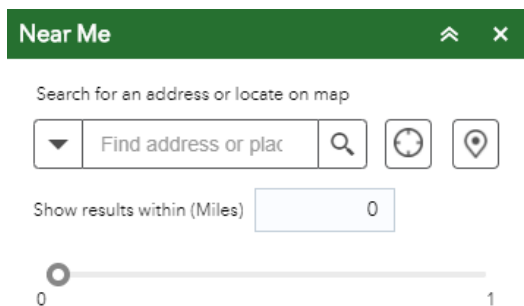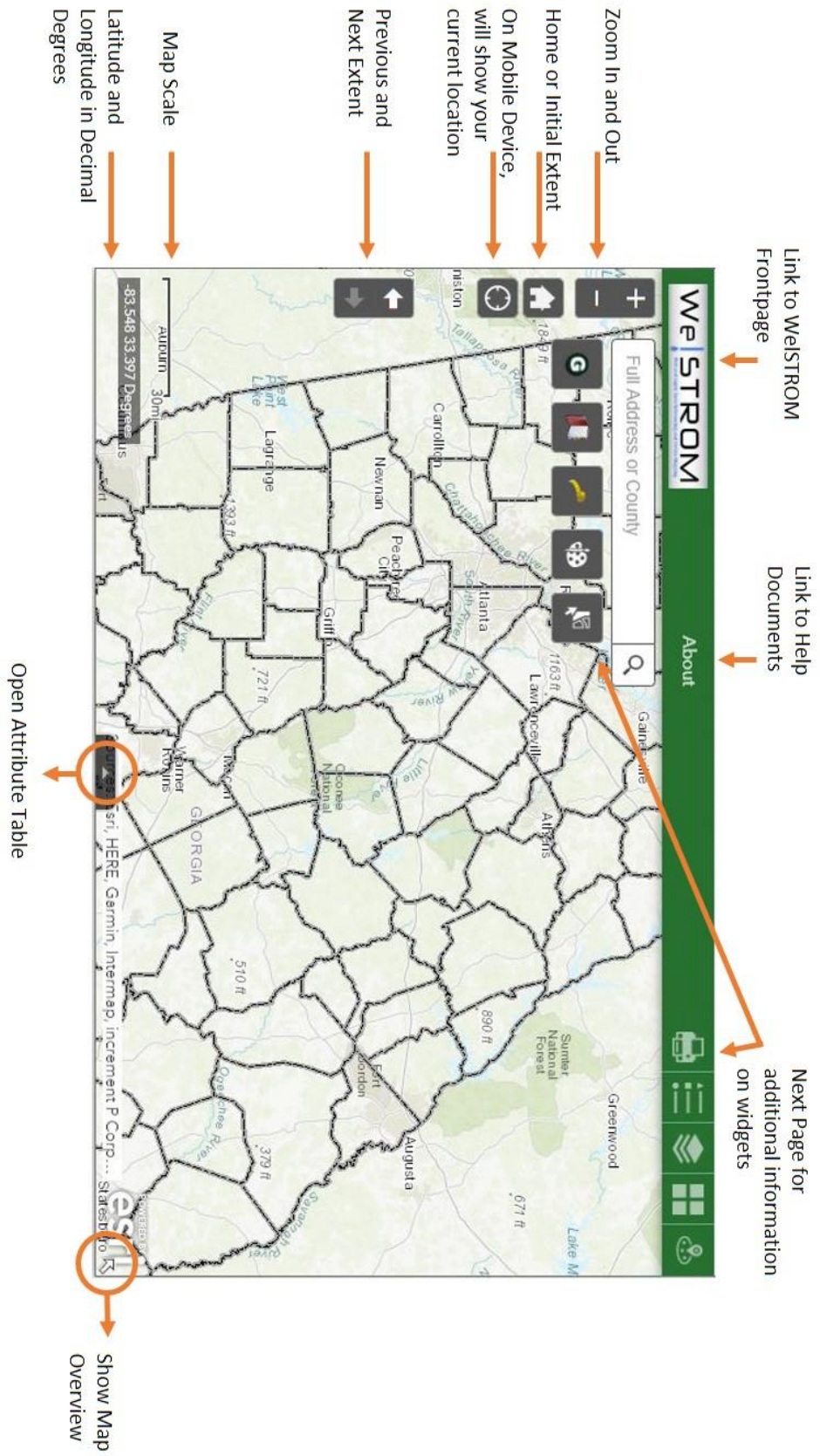

Click the Near Me button to open the widget. Define the area you want to buffer by adjusting the slider to the desired number or type a number in the box (up to 1). Search for an address in the search bar or click a location on the map to define the location to be buffered.

Clicking this button will use the location generated by your mobile devices internal location sensors. You will need to make sure your Location Services are turned on for this feature to work. If using an iPhone, go to Settings – Privacy – Location Services.

Features found within the defined buffer for each layer are listed, as well as a count of how many features belong to each layer. Click a layer in the list of results and you'll see each individual item listed for that layer. Click an individual item to see attributes for that item.

Zoom In and Out

Home or Initial Extent

On Mobile Device, will show your current location

Previous and Next Extent

Map Scale

Latitude and Longitude in Decimal Degrees

Link to WelSTROM Frontpage

Link to Help Documents

Next Page for additional information on widgets

Open Attribute Table

Show Map Overview

Address or County Search

Query Data   Bookmark   Measure   Mark Up   Select Layers by Graphic

Print   Layer On - Off   Near Me

Legend   Basemap Gallery