

Galveston Bay Estuary Program (GBEP) Implementation Tracking Viewer User Guide



Application Overview

The Galveston Bay Estuary Program (GBEP) Implementation Tracking Viewer displays GBEP projects, which have been funded in part by Clean Water Act Section 320 funds from the Environmental Protection Agency, in addition to projects lead by GBEP's local, state, and regional partners. Users can access details on how individual projects implement the actions found in The Galveston Bay Plan, 2nd Edition. Users can also explore approximate project locations in relation to data sets such as legislative districts and land cover.

Project locations are not meant to be exact, as projects can cover large areas and often comprise multiple sites. The GBEP and partner projects presented are not intended to be a comprehensive list of all projects implementing The Galveston Bay Plan, 2nd Edition. GBEP updates the GBEP Projects, GBEP Partner Projects, and GBEP Subwatersheds data sets quarterly at minimum. All other data sets within the GBEP Implementation Tracking Viewer are updated and maintained by other groups.

This map was generated by GBEP, part of the Water Quality Planning Division of the Texas Commission on Environmental Quality. This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries. For more information concerning this map, contact GBEP at (281)218-6461.

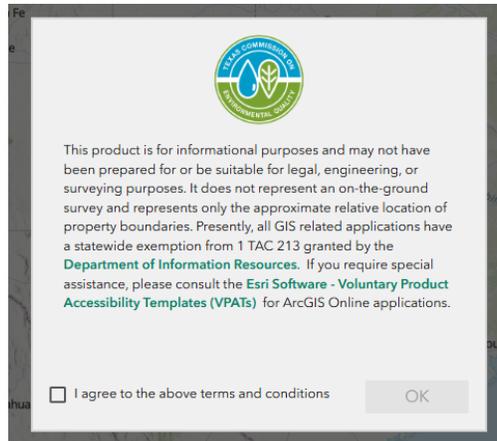
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Navigating Around the Map

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.



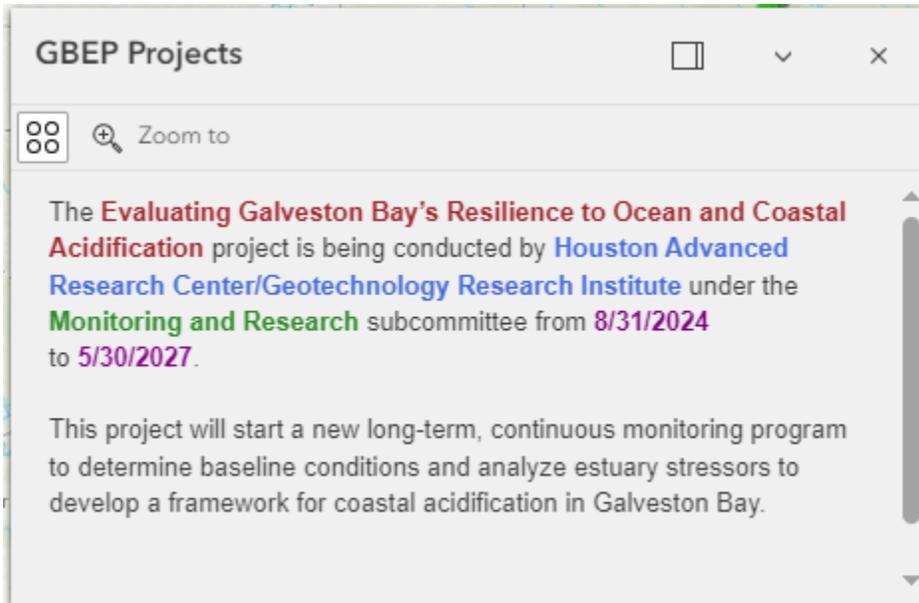
Viewer Header:

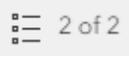
The header section of the Viewer includes the Viewer’s title and essential information about the Viewer. It provides links to the viewer’s landing page under the TCEQ Geographic Web Apps page, the Viewer’s User Guide, the GBEP website, and a form to submit a project to be included in the viewer. A version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



Data Pop-ups:

When a project, watershed protection plan, or surface water quality segment is clicked, a popup window will appear with information. Project popups include (as applicable) information on the project title (red text), lead partner/contractor (blue text), subcommittee (green text), project dates (purple text), weblinks, a project description, and actions implemented from The Galveston Bay Plan, 2 nd Edition (GBEP Projects from 2018-present and all GBEP Partner Projects).



- The pop-ups have certain actions that can be performed on the selected data. Click on the **Actions**  icon to view related data, to view the data in the attribute table, and to export the data. Data can be exported to JSON, CSV, GeoJSON or an ArcGIS Online item.
- To zoom to the selected feature, click **Zoom to**  .
- To view all the selected features, click **Select Feature**  in the lower-right hand corner. To toggle between the selected features, use the **Previous** and **Next** arrows  in the lower left-hand corner.
- To close the window, click **Close**  in the upper right-hand corner.
- To collapse the window, click **Collapse**  just to the left of the close button.
- To dock the window, click **Dock**  to the left of the collapse button.

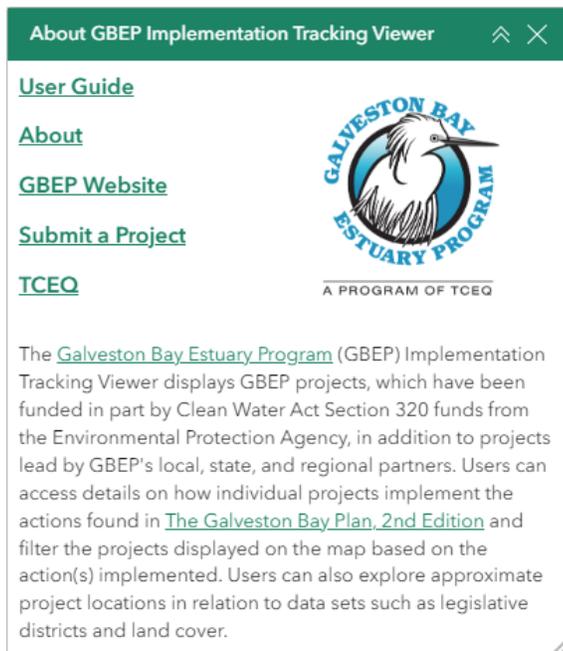
Widget Controller:

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 GBEP Implementation Tracking Viewer

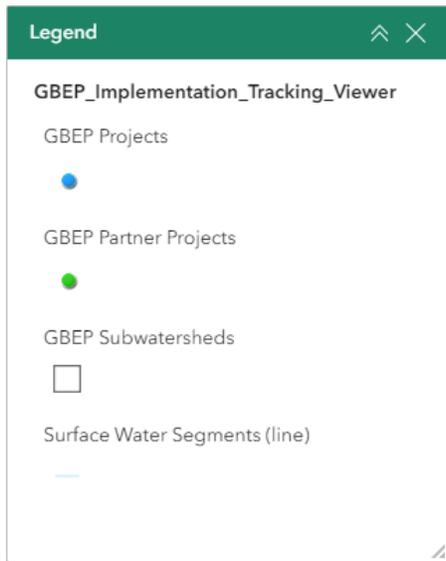
- The **About** widget provides users with essential information regarding the application, including its, purpose, user guide, data sources, and any credits or acknowledgements related to the content.
- To use the **About** widget, click on the **About GBEP Implementation Tracking Viewer**  icon in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



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

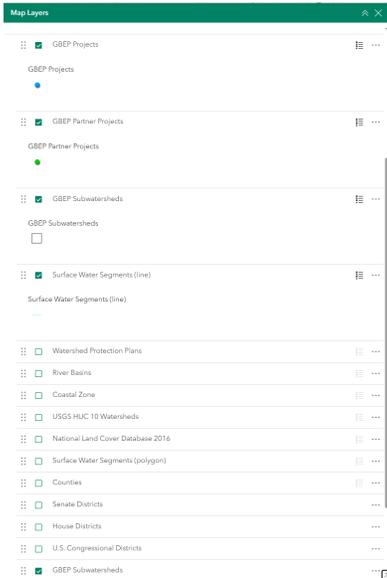
Legend

- The **Legend** widget shows the symbols for the various layers on the map.
- Simply click the **Legend** button  in the widget controller
- The legend will only show those layers that are currently turned on using the layers tool.



Layers

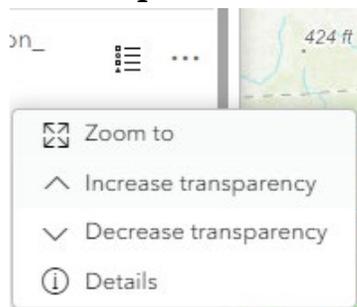
- The **Layers** widget can be used to turn on and off data layers such as the Surface Water Intake and the current query results.
- To **view** the layers, simply click the **Layers** button  in the widget controller.
- Then browse through the available layers.



- 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 checkbox. Here you can see the layer symbology.

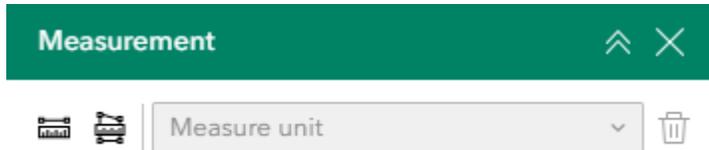


- To **Zoom, change transparency, and get details** of the layers, click on the **options** button  and select the desired option.



Measurement

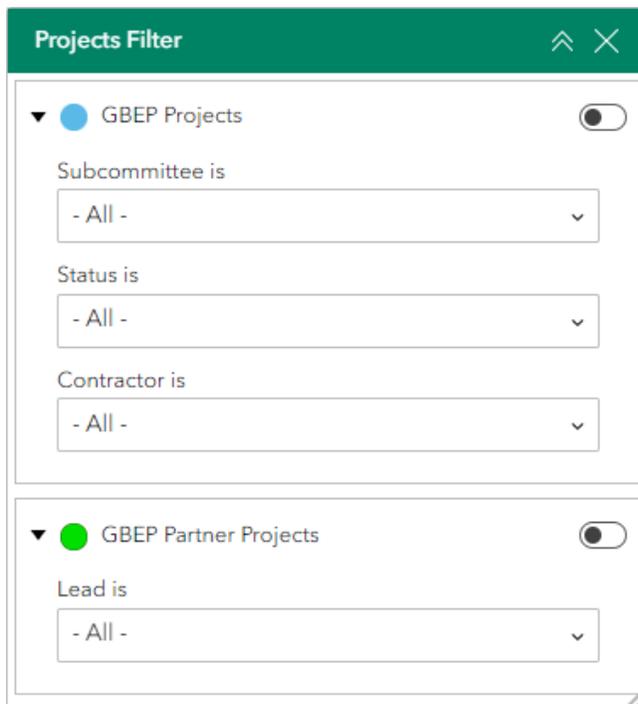
- The Measurement widget enables user to calculate the area and distance directly on the map.
- To measure a feature, click on the **Measurement**  widget in the widget controller.
- The Measurement window will appear as shown below.



- There are two different ways to measure features on the map:
 -  **Distance** - Click the button with a line (first from the left), 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.
 -  **Area** - Click the button with a polygon (second from the left), 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.
- To clear the measurement, click the **Trash** icon  or **New Measurement** .

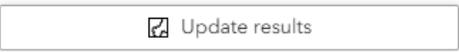
Projects Filter

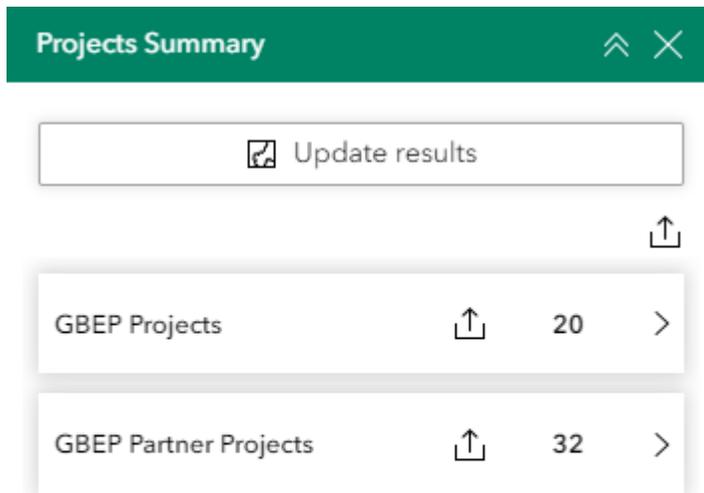
- The **Projects Filter**  widget enables users to filter GBEP Projects by subcommittee, status, or contractor and GBEP Partner Projects by lead partner.
- Select the criteria for your filter using one to three of the dropdown lists for GBEP Projects and one dropdown list for GBEP Partner Projects.
- Once criteria are selected, toggle the filter on for each layer by switching the **Toggle** button on .
- The projects in the map will be filtered to meet the criteria.
- To disable the project filters, toggle the filter off for each layer by switching the **Toggle** button off .
- To expand the window, select the bottom right corner of the window and drag



The screenshot shows the 'Projects Filter' widget interface. It has a green header with the title 'Projects Filter' and two icons: an upward arrow and a close 'X' button. The main content is divided into two sections. The first section is for 'GBEP Projects', indicated by a blue circle and a dropdown arrow. It has a toggle switch on the right, which is currently turned on. Below this are three dropdown menus: 'Subcommittee is' with '- All -', 'Status is' with '- All -', and 'Contractor is' with '- All -'. The second section is for 'GBEP Partner Projects', indicated by a green circle and a dropdown arrow. It has a toggle switch on the right, which is currently turned off. Below this is one dropdown menu: 'Lead is' with '- All -'. The bottom right corner of the widget has a small handle for dragging.

Projects Summary

- The **Projects Summary**  widget enables users to navigate to predefined map locations.
- Click to view a summary of the GBEP Projects and GBEP Partner Projects layers displayed within the current map view. The number of visible features for each layer will be displayed on the right. The number is filtered by the current map extent and any other filters that may have been applied. Click the **Expand** arrow  to view project titles, contractors/partners, and project descriptions.
- If you want to view the projects available within a certain map extent or filter, click **Update Results**  to apply changes.
- To export the selected features, click the **Export** icon  to export to JSON, CSV, GeoJSON, or an ArcGIS Online item.

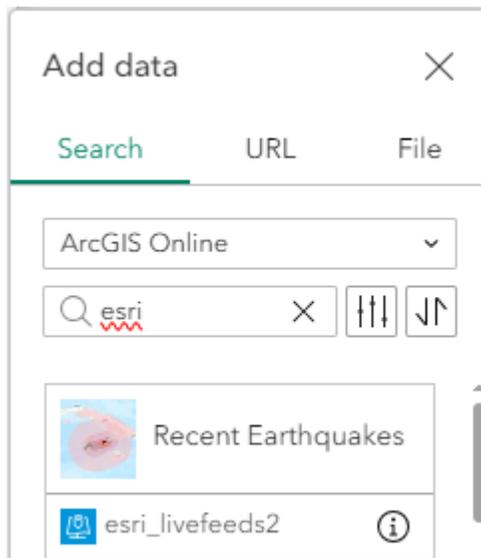


The screenshot shows the 'Projects Summary' widget interface. At the top is a dark green header with the text 'Projects Summary' and two icons: an upward-pointing arrow and a close 'X' icon. Below the header is a white button with a checkmark icon and the text 'Update results'. Underneath the button is a table with two rows of project data. Each row includes a project name, an export icon (a square with an upward arrow), a feature count, and an expand arrow icon (a right-pointing chevron).

Project Name	Export Icon	Feature Count	Expand Arrow
GBEP Projects		20	
GBEP Partner Projects		32	

Add Data

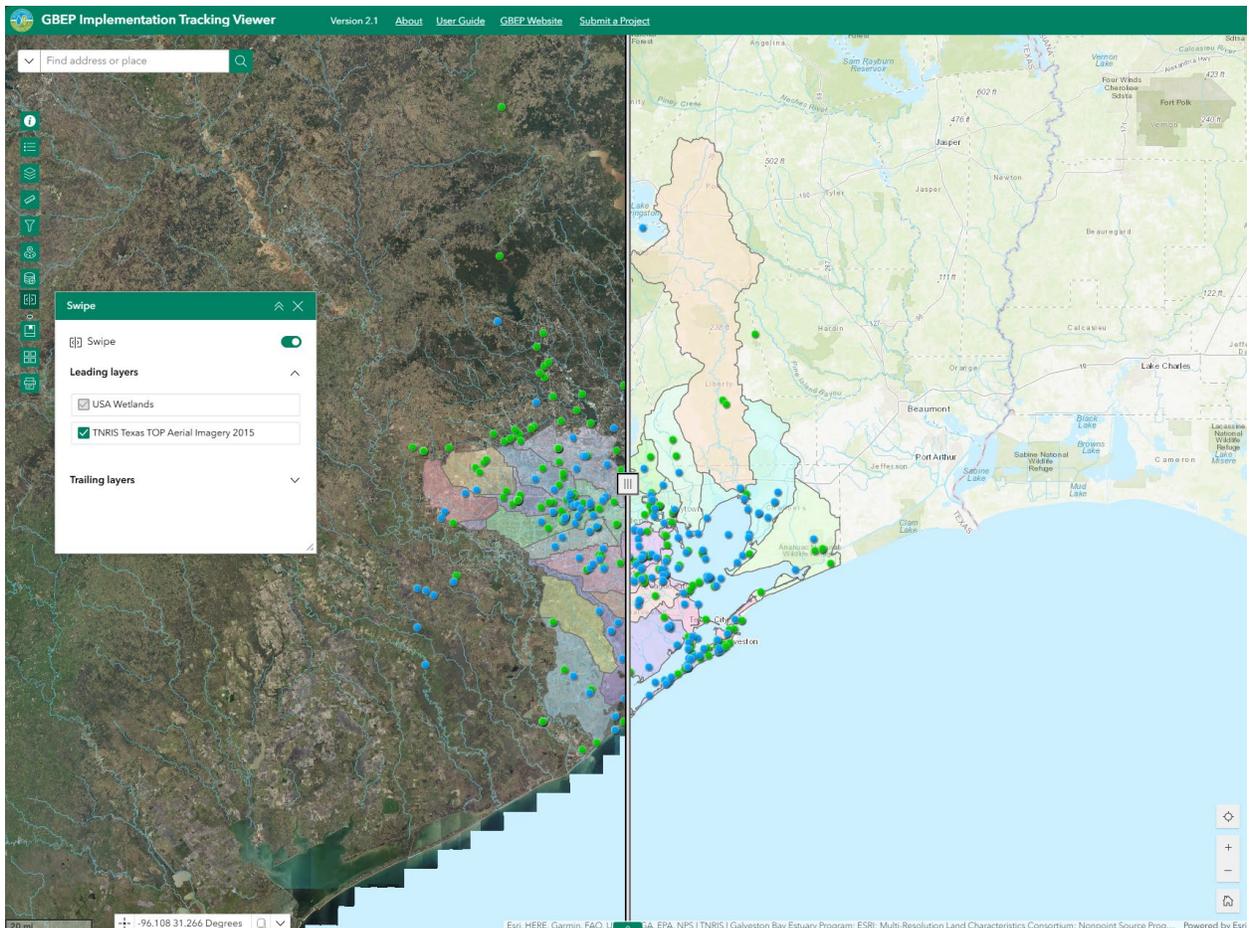
- Click to add publicly available layers from ArcGIS Online or external websites, or user-owned GIS layers. Layers added to the viewer using the **Add Data**  widget will be removed when the viewer is closed and will not appear when the viewer is opened again.
- To search publicly available layers on ArcGIS Online, select “Click to add data”, then select “ArcGIS Online” from the drop-down menu under the search tab. In the search bar, enter the name of the layer you are searching for (e.g., “forest”) or layer author (e.g., ESRI). Select the data you would like to add and click “Done”. To add a layer from your computer, select the “File” tab.



- From the **Add Data** widget window, click on the **Actions** icon  to add the data to your map.
- To move the layer under the project points, click on **Layers**  in the widget controller, hold the **Reposition: “layer name”** icon  to the left of the added layer, and drag the layer to its desired position.

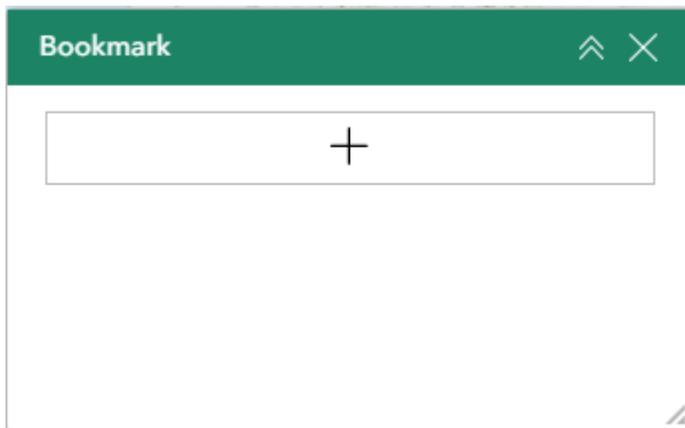
Swipe

- The **Swipe**  widget allows users to see under map layers, such as “USA Wetlands”, “TNRIS Texas TOP Aerial Imagery 2015”, “EPA EJSCREEN”, or layers added with the **Add Data** widget.
- Ensure that one of these layers is enabled by checking the box for that layer in the Layer List.
- Turn on the swipe by switch the **Toggle** button . Click on the **Expand** arrow  next to “Leading layers” to select the layer(s) you would like to swipe. Click on the **Expand** arrow  next to “Runtime layers” to swipe with the layers that were added from the **Add Data** widget.
- Select the bar in the center of the viewer and move left to right to see the layers underneath.
- Turn off the swipe tool by switching off the **Toggle** button .



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 the **Add Bookmark**  icon in the window.

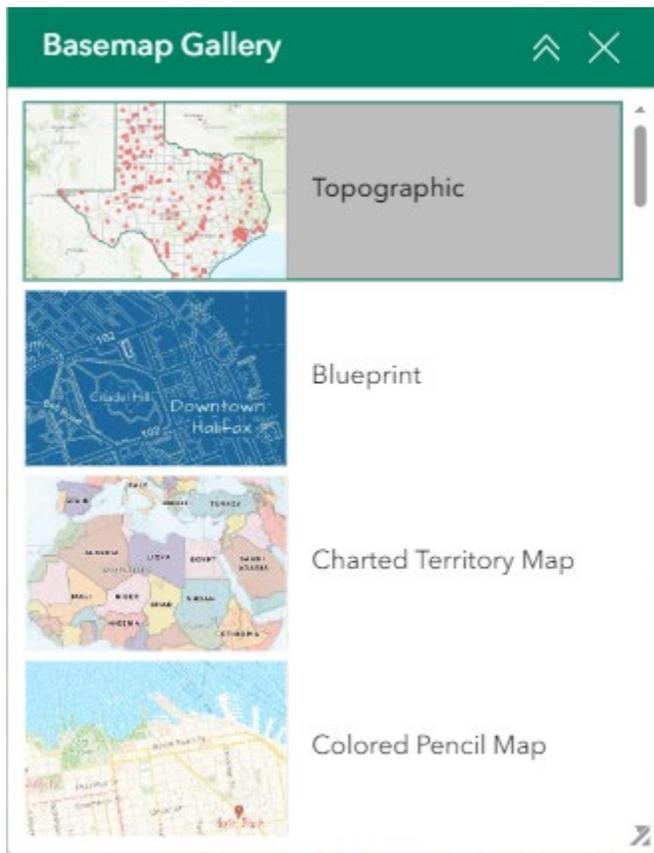


- To view, click on a created bookmark.
- Click on the name of the bookmark to rename it. Click on the **Trash can**  icon on the right to remove the bookmark.



Basemap Gallery

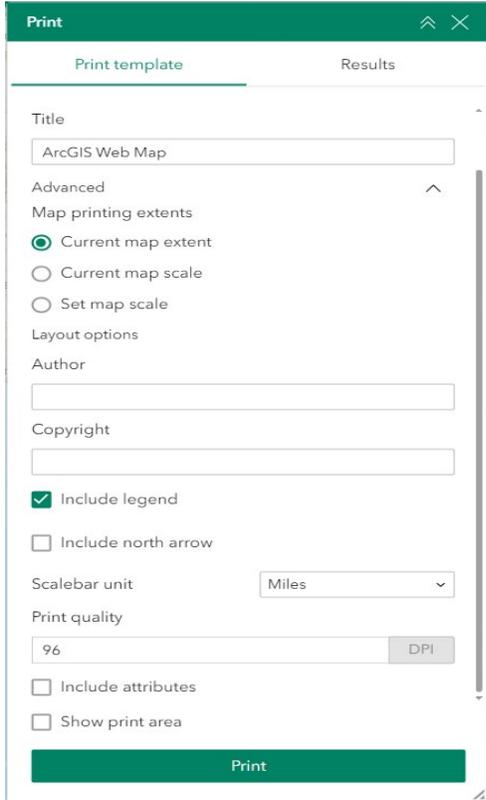
- The **Basemap Gallery** widget can be used to change the background in the map viewer. The topographic basemap is the default basemap.
- To change the basemap, click on the **Basemap Gallery** widget  on the widget controller, then select the basemap you wish to use.



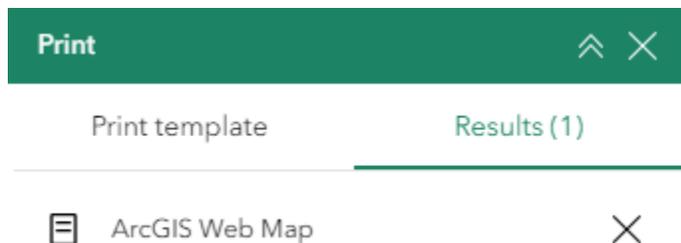
- You may choose from thirty-four different basemaps.

Print

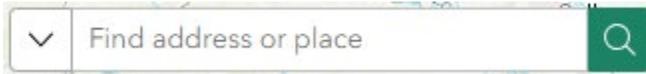
- Use the **Print** widget  to save the current map as a pdf file. You may give it a customized title and select a layout and size. Advanced features include ability to add map scale, author, copyright, north arrow, and legend. You may also set the map extent and printing quality.



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



Search Bar:



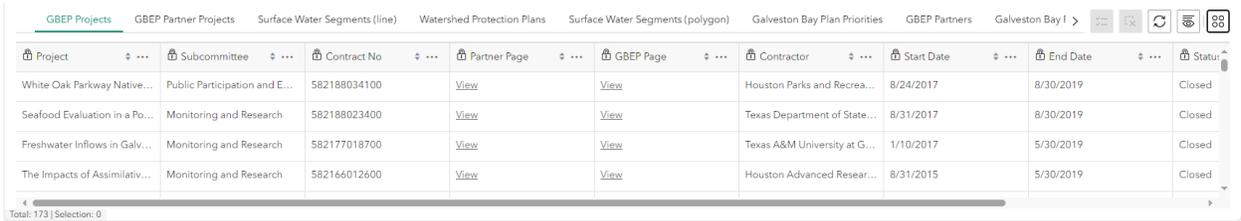
- Type in an address or place into the bar to search for a location. As you type, you will be presented with similar matches. If you see your desired location appear, simply click on it and the map will zoom to that location. Or you can complete typing in the location and then press Enter on the keyboard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

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

- Addresses: 17041 El Camino Real, Houston, TX, 77058
- Names of places or projects: Houston Zoo, Cedar Bayou, Trash Bash

Attribute Table:

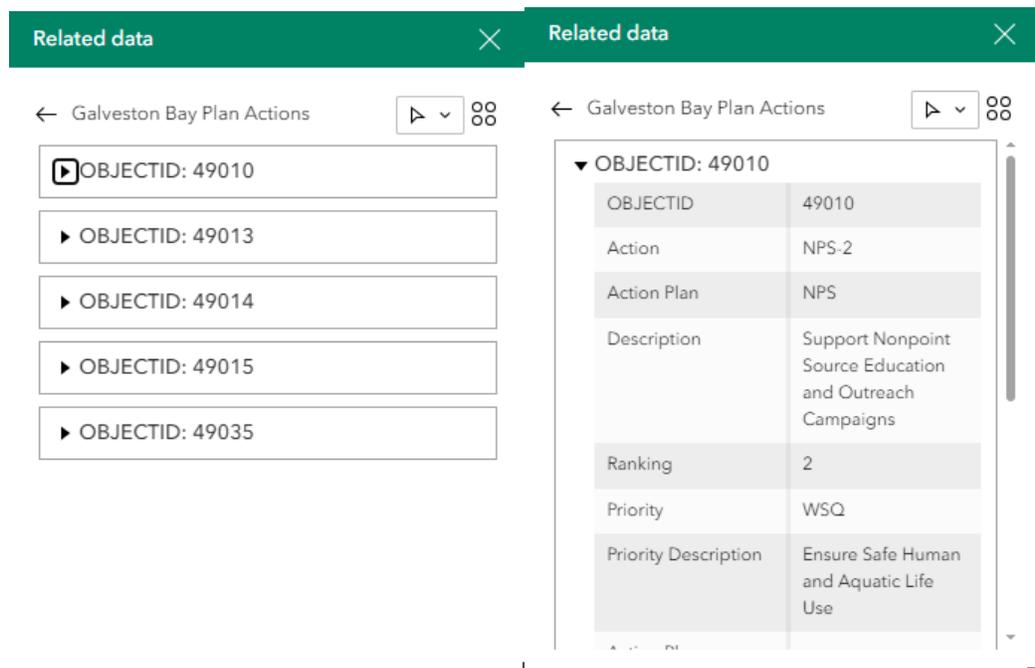
To view the attribute table, click on the green **Expand** arrow  at the bottom of the viewer. The attribute table will expand. To collapse the attribute table, click on the green **Collapse** arrow  at the top of the table.



Project	Subcommittee	Contract No	Partner Page	GBEP Page	Contractor	Start Date	End Date	Status
White Oak Parkway Native...	Public Participation and E...	582188034100	View	View	Houston Parks and Recrea...	8/24/2017	8/30/2019	Closed
Seafood Evaluation in a Po...	Monitoring and Research	582188023400	View	View	Texas Department of State...	8/31/2017	8/30/2019	Closed
Freshwater Inflows in Galv...	Monitoring and Research	582177018700	View	View	Texas A&M University at G...	1/10/2017	5/30/2019	Closed
The Impacts of Assimilativ...	Monitoring and Research	582166012600	View	View	Houston Advanced Resear...	8/31/2015	5/30/2019	Closed

Relationships between projects and actions of The Galveston Plan, 2nd Edition can be explored in the attribute tables.

- To view related actions for a project or set of projects:
 - Select and highlight the project row in the GBEP Projects or GBEP Partner Projects attribute table.
 - Select the **Actions** icon , select “Related data”, then select “Galveston Bay Plan Actions”. The actions attribute table will open, displaying only those actions implemented by the selected project(s). Keep in mind that while all GBEP Partner Projects are associated with actions, only GBEP Projects from 2018 (when The Galveston Plan, 2nd Edition draft was published) to present are associated with actions.



Related data

← Galveston Bay Plan Actions 

-  OBJECTID: 49010
-  OBJECTID: 49013
-  OBJECTID: 49014
-  OBJECTID: 49015
-  OBJECTID: 49035

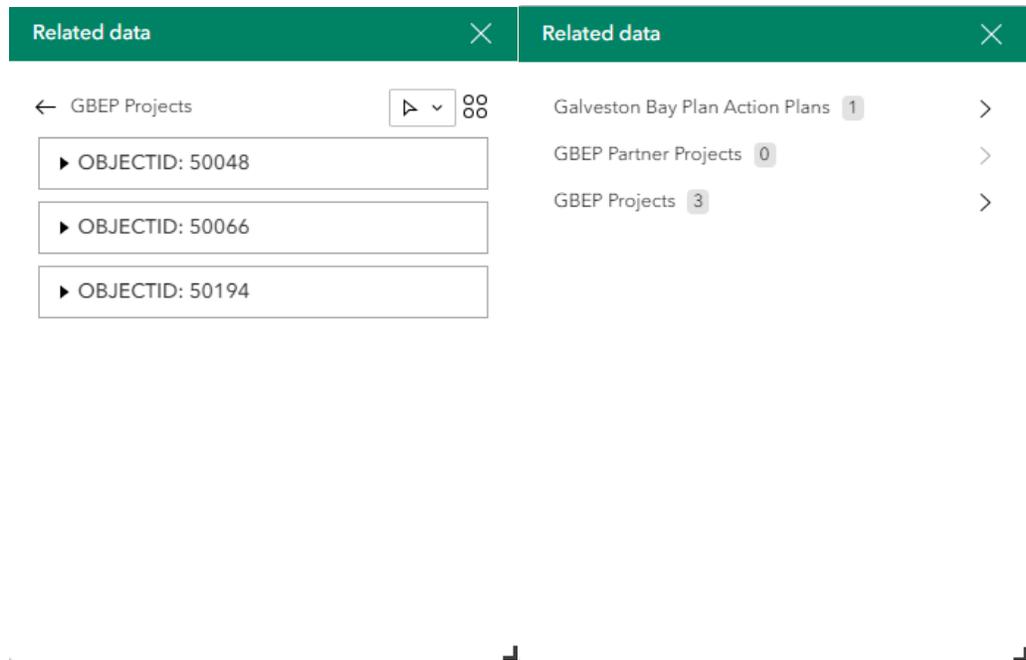
Related data

← Galveston Bay Plan Actions 

▼ OBJECTID: 49010

OBJECTID	49010
Action	NPS-2
Action Plan	NPS
Description	Support Nonpoint Source Education and Outreach Campaigns
Ranking	2
Priority	WSQ
Priority Description	Ensure Safe Human and Aquatic Life Use

- To view projects associated with a particular action or set of actions:
 - Select and highlight the action row in the Galveston Bay Plan Actions attribute table.
 - Select the **Actions** icon , select “Related Data”, then select “GBEP Projects” or “GBEP Partner Projects”. The projects attribute table will now only display projects that implement the selected action(s).



Map Navigation Tools:

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



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

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

 **Default Map View** – Click the **default map view** button once to return to the default extent

 **Find My Location** – Click the **find my location** button to 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 **Enable clicking the map to get the coordinates**  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 **Copy**  icon.

Submit a Project:

If you are involved with a project that implements actions from The Galveston Bay Plan, 2nd Edition that you think should be included in the GBEP 15 Implementation Tracking Viewer, please submit information about the project to GBEP using the “Submit a Project” link located on the main tool bar.

Contact Us

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(281)218-6461