## Getting Started with the NH Coastal Viewer

The NH Coastal Viewer is an online mapping tool that offers access to spatial data describing New Hampshire's coastal resources and coastal hazards. The Viewer has been updated using ESRI's Experience Builder platform. This document is intended to help you get started using the tools and functions available on the updated Viewer. The Coastal Viewer performs optimally on Desktop computers, but it is accessible on devices of all sizes. This document will indicate where the Mobile experience differs from the Desktop.

## Table of Contents:

**Viewer Features**

Upon loading the NH Coastal Viewer, you will see a page displaying a web map and a "Welcome to the NH Coastal Viewer" panel. To begin working with the web map, view the Table of Contents by clicking **Layers List** above the Welcome to the Viewer text.
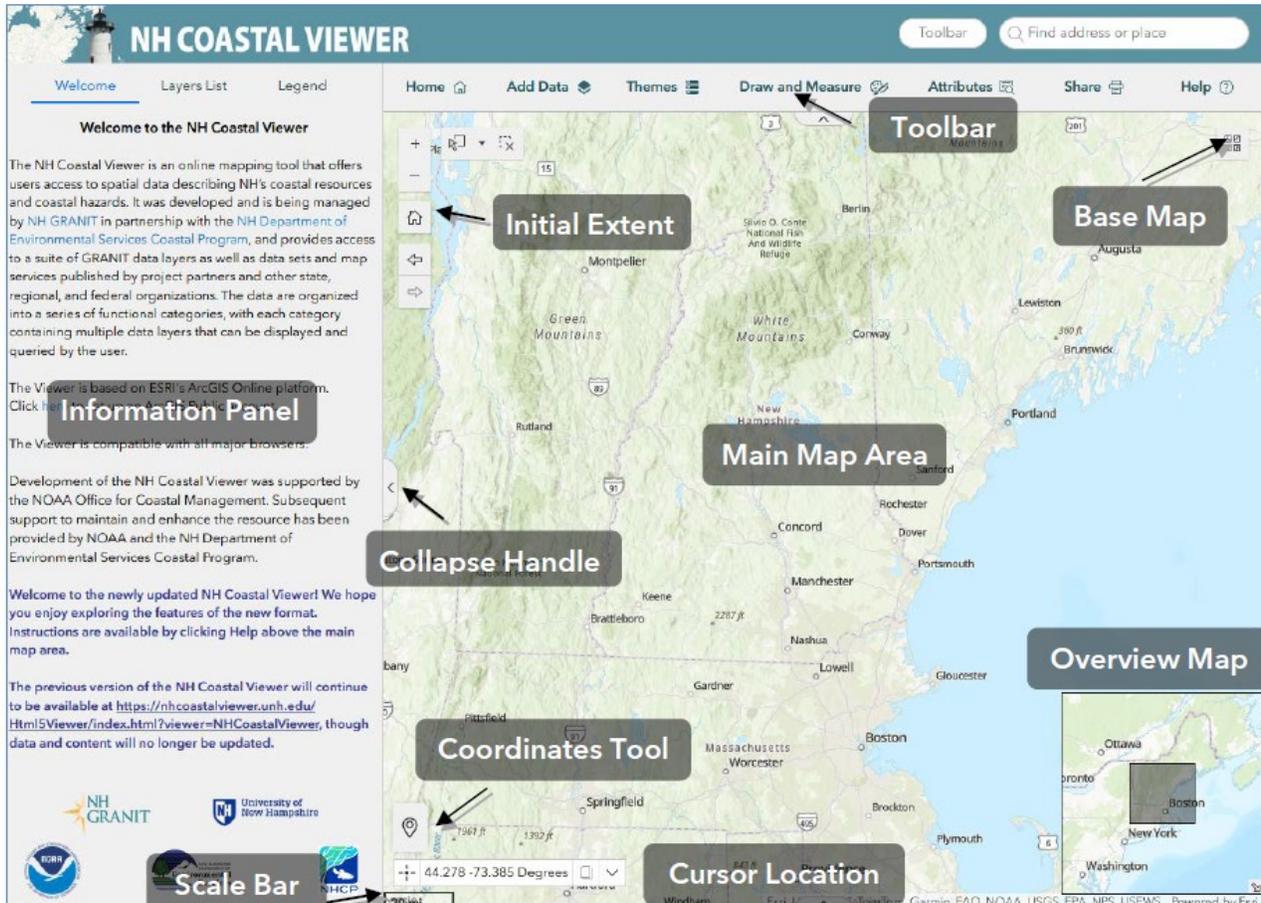


- **Information Panel**: displays the map's data Layers and Legend. This panel will also display options pertaining to various tools. Return to the data list at any time by clicking Layers List at the top of this panel.
- **Main Map Area**: displays the data layers that are turned on in the Map Layers Panel.
- **Toolbar**: contains tools to interact with the map and data. Hide or display this toolbar by clicking the Toolbar button.
- **Find address or place**: navigate to a location using ArcGIS World Geocoding Service.
- **Initial Extent**: returns map extent to the default.
- **Base Map**: change the Base Map.
- **Coordinates Tool**: find an address or coordinate location in the map.
- **Cursor Location**: displays the coordinates of the cursor when hovering over the map; click a location to place a temporary flag and display its coordinates.
- **Scale Bar**: shows the current map scale.
- **Overview Map**: shows the extent of the current map relative to the surrounding region. This is closed by default. Click the small arrow in the lower right corner of the Coastal Viewer to open.
- **Collapse Handle**: collapses or expands the Information Panel. This may be used to maximize map space on a smaller screen device.

**Layers**

The **Layers List** is used to turn on and off the data layers available within the Coastal Viewer. Display this list by clicking **Layers List** at the top of the **Information Panel**.

Data layers are grouped into functional categories that are presented in a folder-like structure. Click the **>** symbol next to a category/folder to reveal the list of layers it contains. To see a listing of the organizational layout and available layers in the Coastal Viewer, go to the **Help** tab and click "Full Layer List."

Search for a specific layer name using the **Search Box**.

Data layers are made visible in the map by clicking the checkbox next to the layer name. **You must select all the checkboxes in the hierarchy above the desired data layer**, as shown in the figure. Notice in the figure that the "Administrative and Political Boundaries" and "NH Parcel Mosaic" folders are both checked to display the "Parcels - polygons" layer.

**Layer Legend**
When a data layer is turned on for display, its legend becomes accessible in the **Layers List**. To display or hide the legend, click the icon to the right of the layer name. Legends may be displayed at the folder and item levels. To view the complete legend of all visible data layers in the map, click the **Legend** tab at the top of the **Information Panel**.

**Layer Visibility**
Data layers are drawn on the map in reverse order to the **Layers List**. In other words, layers at the top of the list are drawn on top of layers at the bottom of the list. This may affect the visibility of your data, depending on the data type (i.e. points or polygons) or density of the data (i.e. aerial photography which covers an entire area). To adjust the transparency of a layer to reveal data underneath, see the **Layer Options** instructions below. It is also possible to reorder layers by clicking the dots to the left of the layer and dragging the layer to a new location. Please be aware that it is possible to move layers out of their original folder structure. This will impact which boxes must be checked/unchecked to toggle layer visibility.

Map scale is another factor which may impact the visibility of data. Complex layers with many features can slow down the Viewer at very small map scales (that is, when the map is zoomed out). For this reason, scale dependencies are set to control the scale at which features become visible on the map. Some data layers will initially appear in gray font in the **Layers List**. The font will change to black once you have zoomed in to a scale large enough for the features to be drawn.
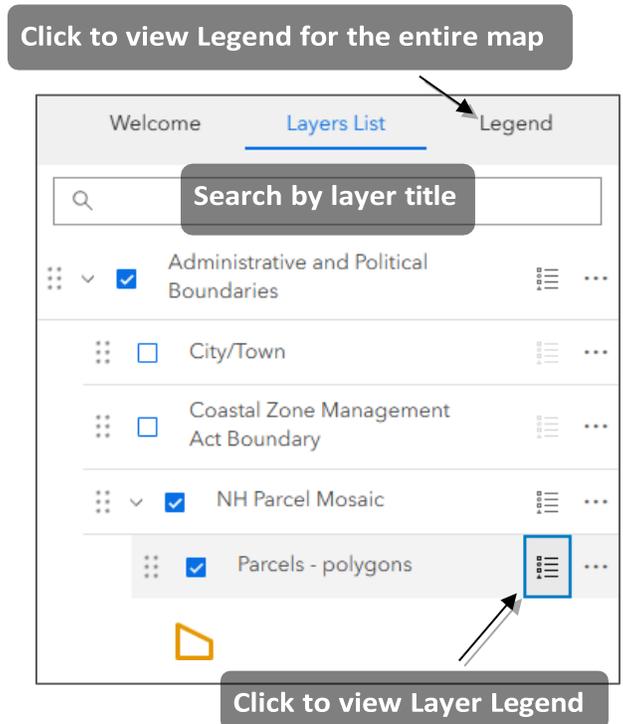
**Layer Options**

Layer Options are available by clicking the three dots to the right of the layer name.



**Zoom to** changes the map display to the extent of the layer.

**Show/Hide labels** turns on and off preset labels.

**Increase transparency** allows underlying data layers in the map to become visible through the transparent layer. This may be useful if you wish to show overlapping datasets in your map.

**Details** provides more information about the dataset. If the dataset is publicly available on ArcGIS Online, clicking Details will open the appropriate item in ArcGIS Online. Click the Metadata button in the Item Description page for full metadata. If the data are part of the Coastal Viewer via a service, the service's metadata will open.



**Set filter** allows you to limit which features are displayed using the feature's attributes. To define a filter, choose **Set filter** from the Layer Options menu. This will open the window shown at right. Click Add and select Clause.

Use the **Set filter** dialog to choose the attribute or set of attributes to define your data filter. Click the toggle in the upper right of the window to apply the filter or turn off the filter. Click X to remove a filter clause.



**Add to table** allows the attribute table of the layer to be viewable in the attributes pane. For more information about **Attributes**, see page 8 of this document. You should not have to use **Add to table** for layers that are included in the Viewer by default. However, if you add custom data to your map, or if you cannot find a specific attribute table in the available list, you may select Add to table to view the attribute table.

**Export** allows you to export data in limited formats. NH GRANIT recommends visiting the NH Geodata Portal (www.nhgeodata.unh.edu) to download data in multiple formats, including shapefiles. The **Export** feature here in the Coastal Viewer only includes .csv format to export the attribute table or JSON format for exporting features. JSON files can be imported into GIS software to create shapefiles or feature classes. See the help info of your GIS software or contact granit@unh.edu for more assistance.
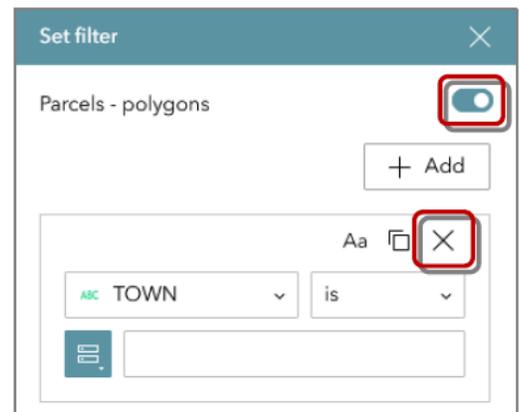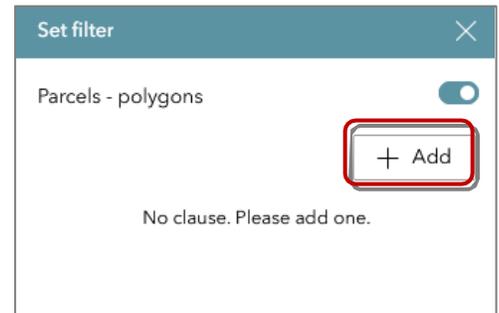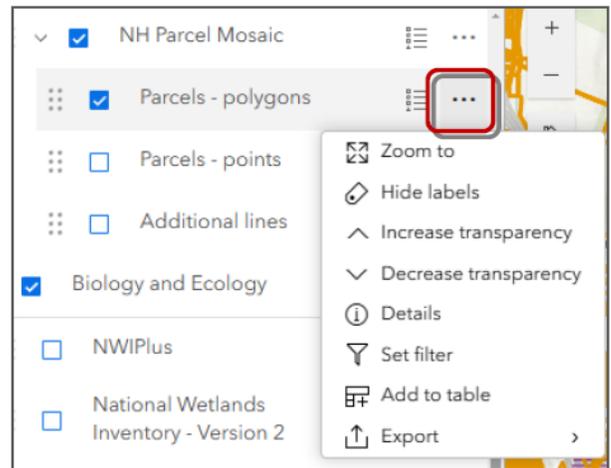
**Toolbar Buttons**
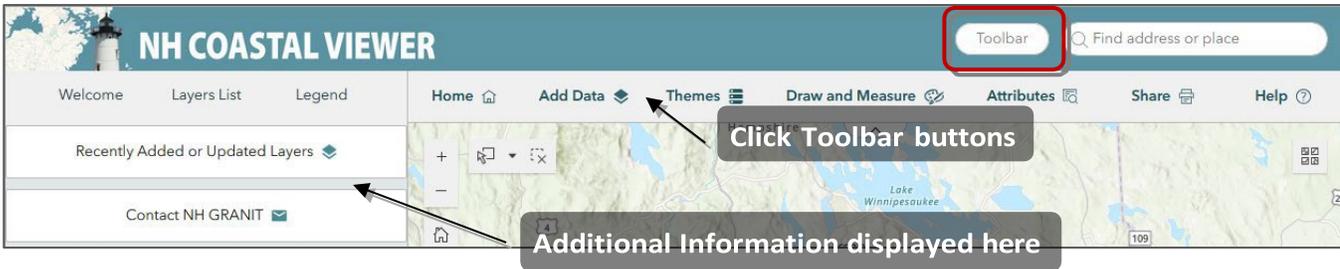


The Toolbar above the Main Map contains buttons for:

- Home

- Add Data

- Themes

- Draw and Measure

- Attributes

- Share

- Help

When these are selected, additional information will appear in the **Information Panel**. The Toolbar can be collapsed and expanded by clicking the Toolbar button in the header.

**Home**

The **Home** button provides access to a listing of **Recently Added or Updated Layers**, a link to email NH GRANIT, an address search function, and add a Bookmark.

**Bookmarks**

A **Bookmark** opens the map to display specific data layers and map extent. If you wish to save a custom map display during your mapping session, you can create your own bookmark using the plus sign button.

Custom Bookmarks are not saved permanently; they will be lost when your browser history is cleared.
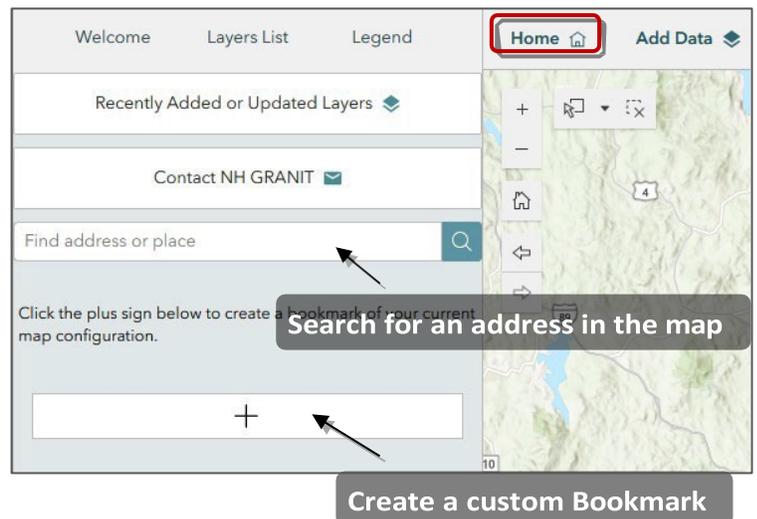
**Add Data**

The **Add Data** button allows you to add layers from ArcGIS Online (AGO), from a service URL, or from files on your local computer.

The "Coastal Viewer Layers" option searches AGO items that are included in the Full Layer List of the NH Coastal Viewer. This feature may be useful if you begin mapping with one of the **Data Themes** then decide to add other Coastal Viewer layers.

If you wish to add AGO data from your account or from your organization's account, you will need to sign in to AGO. Sign In is not generally necessary in the Coastal Viewer.

**Data Themes**

The **Themes** button allows you to limit the available data layers to a specific topic. Select a **Theme** to open a map with selected data layers. The user can toggle between these themed maps using this menu.

Select "All Layers" to return to the original map. You may also return to the original map by clicking the **Home** button in the Toolbar.

*Note: In the Mobile version of the Coastal Viewer, clicking Home will not change the map Theme to All Layers.*
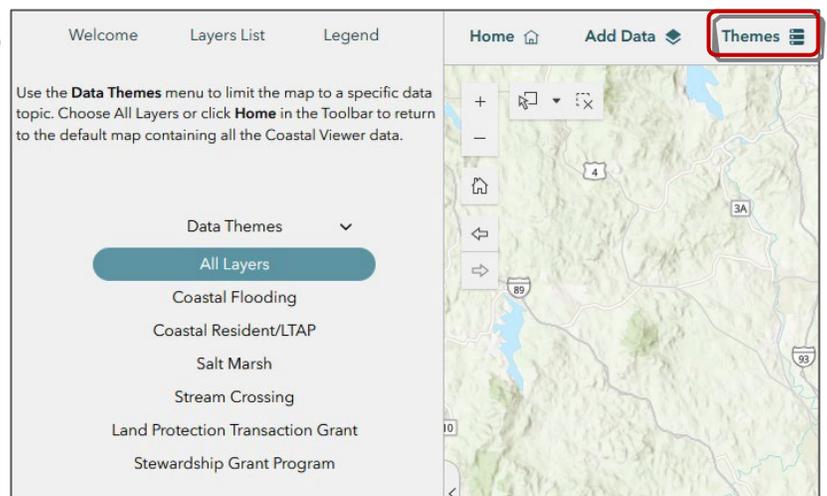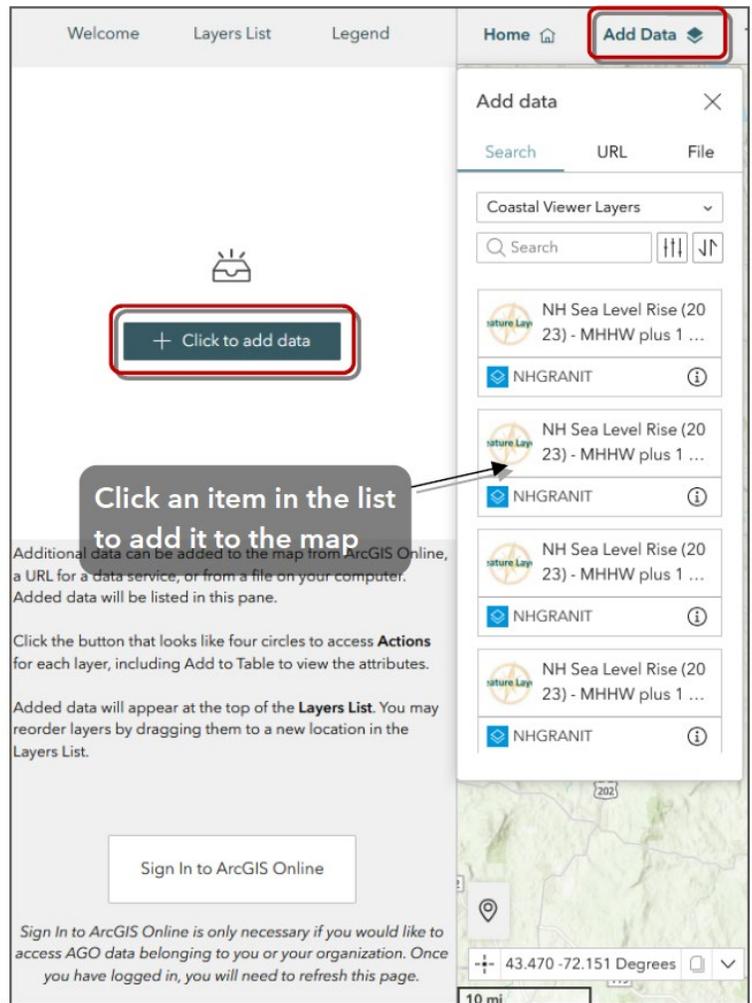
**Draw and Measure**

The **Draw and Measure** button opens tools to create graphics or add text in the map and display measurements of length and area in various units. If the settings do not fit within the panel, you may resize the panel by clicking the right-side line and dragging it to the correct size.

To **Measure** distance or area, simply select the line tool or polygon tool and click in the map. Click your desired points slowly, as the map may take a few seconds to calculate the dimensions and display the features.
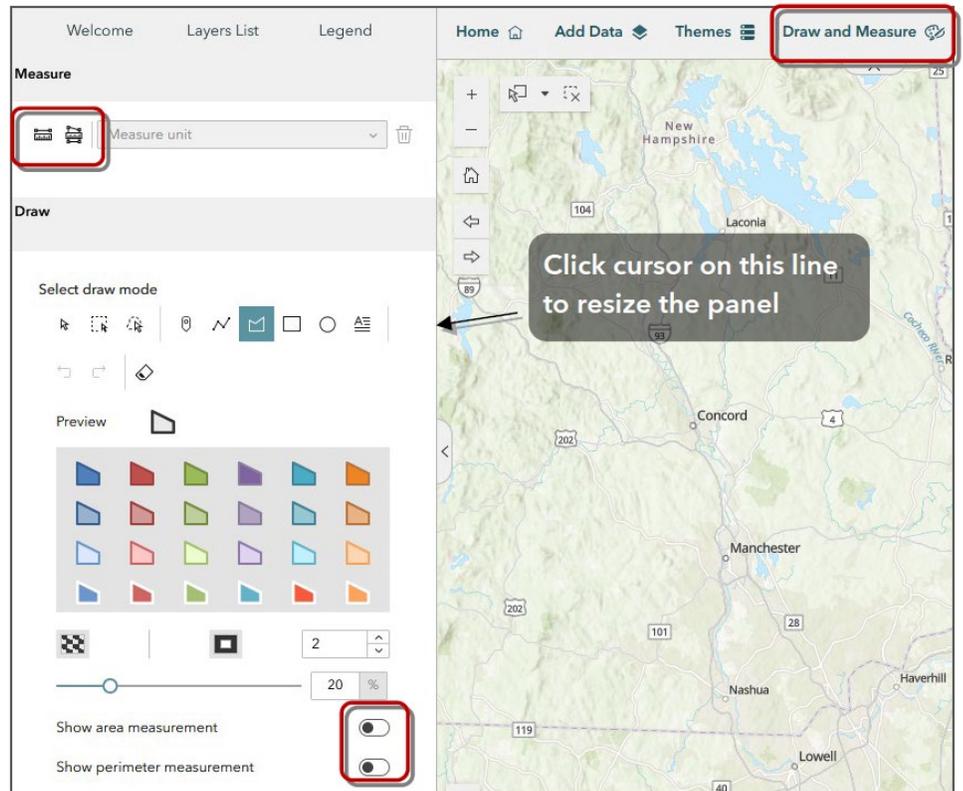


To **Draw** features, select a drawing style and click in the map to begin. The colors, transparency, line thickness, etc. must be set before drawing a feature. Likewise, toggle on "Show area measurement" or "Show perimeter measurement" before drawing the feature.

After you have drawn features, you may use the select buttons to choose the feature(s) to resize, duplicate, or delete individual drawings. The button that looks like an eraser will clear all drawings

*Note: Draw is not available in the Mobile version of the Viewer. The Measure tool can be found in the Main Map Area.*
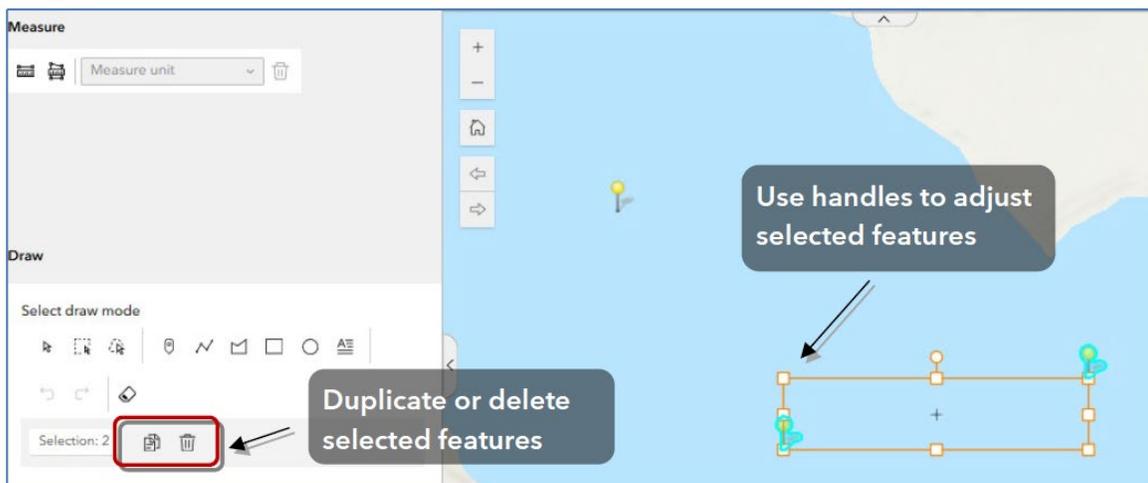
**Attributes**

The **Attributes** button provides access to attribute tables as well as options for selecting features and attributes. Start by turning on the desired data in the **Layer List**. Then click the **Attributes** button to view the interface below.



Click **Open Attribute Tables** to expand the attribute table pane below the map. The pane can also be collapsed and expanded using the handle in the top-middle of the pane.

Choose your desired dataset using the drop-down menu within the attribute table pane.

To **Select** features, choose a selection method (rectangle, point, etc.). Make data layers selectable by clicking the box next to each layer.

To stop selecting features, click the selection method icon again (it is highlighted when enabled).

Once you have selected your desired features, you may choose actions using the button that looks like four circles. Clear selection with the "x" icon.

You can interact with the attributes of selected features using the buttons in the upper right corner of the Table pane.

These include:

- Show only selected features/all features
- Clear selection
- Refresh
- Show/Hide table columns
- Actions
    - Statistics – specify a column to display count, average, min/max, etc.
    - Zoom to
    - Pan to
    - Export – export data in .csv or JSON formats*
    - Set filter – filter data (features and attributes) by defining attribute clauses; this process is described above in the Layer Options section

*Note on Data Export: NH GRANIT recommends visiting the Data Portal (www.nhgeodata.unh.edu) to download data in multiple formats. The Export feature here in the Coastal Viewer only includes .csv format to export the attribute table or JSON format for exporting features. JSON files can be imported into GIS software to create shapefiles or feature classes. See the help info of your GIS software or contact granit@unh.edu for more assistance.

**Print and Share**

The **Print** function allows you to create a pdf of your map view. Expand the Advanced settings to view all the options that can be customized. If you include a Legend, it will adjust font and patch size to accommodate all necessary symbols. Therefore, a map with many data layers will result in very small text in the Legend.

When you click **Print**, a link to your map will be generated in the **Results** tab of the panel. A grey spinner will display next to "Results" while your map is being created. Click Results, then the name of the map, to open the pdf in a new browser tab. It is recommended that you immediately save this map to a destination such as your local computer. The links to the pdfs are temporary and will become unavailable after a few minutes.

The **Share** buttons create a custom tiny URL or QR code. The URL will open the Coastal Viewer to the view you see when you create the link, including the data layers you have turned on.

**Help**

The **Help** button provides access to help documents for the Coastal Viewer including this guide and the Full Layer List, and how to contact NH GRANIT.