**MR*Mapper* WebApp (v2.27) - User Manual**

Using the WebApp on any device (pc, mac, tablet, or phone) will contain the same functionality, but the 'look and feel' of the WebApp will be different depending on your particular device. Use the manual below, beginning on the next page, as a guideline to using the WebApp.

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When you first login to the WebApp the interface will look **similar** to the image below. Depending on the WebApp you are viewing additional data layers may appear when you zoom in to the display. What **YOU** actually see will be dependent upon the device you are using. The image below was taken from a Windows Desktop. Tablets and phones will appear differently, but you will see all the elements highlighted below.
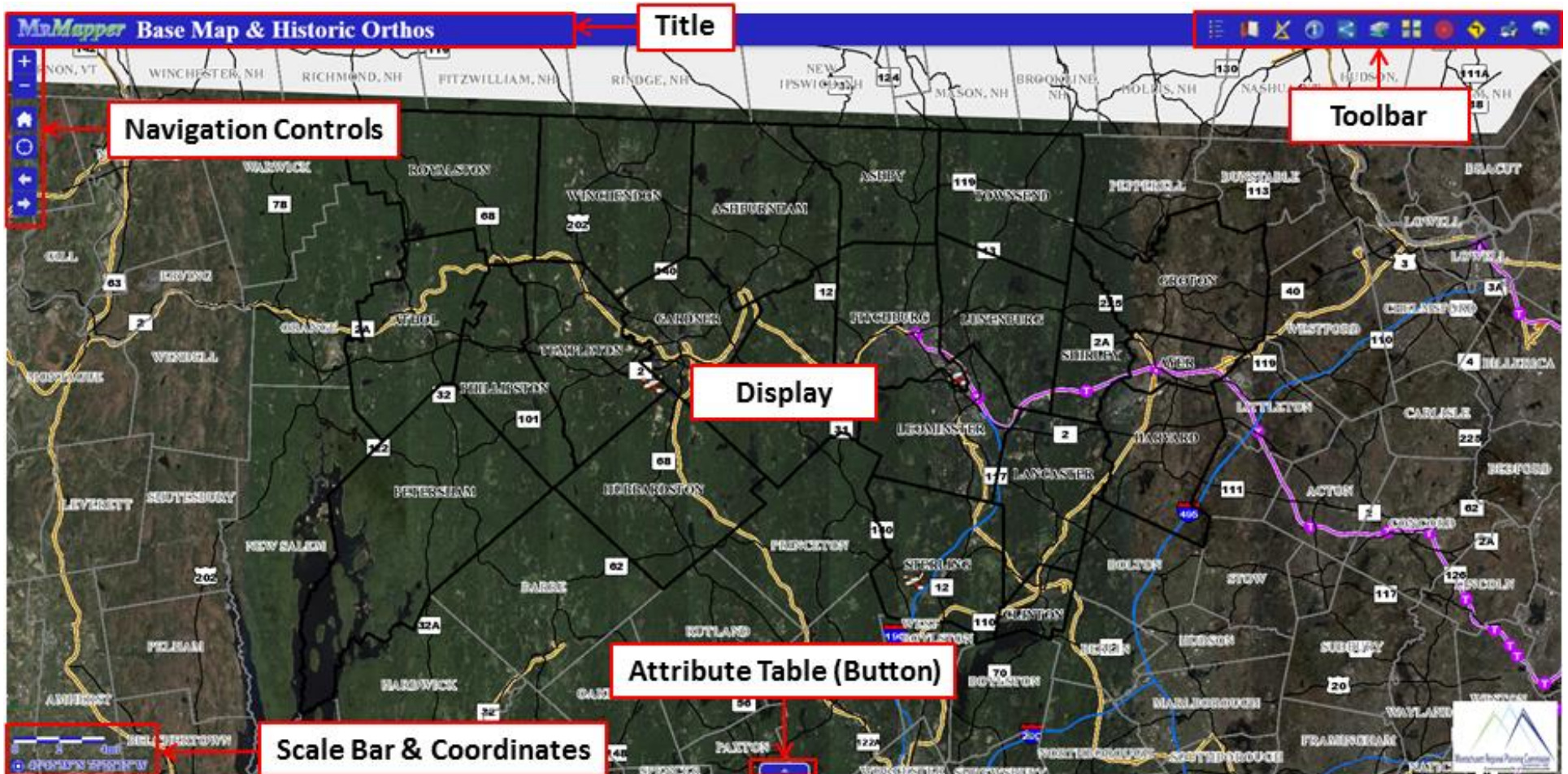
Detailed instructions on understanding the tools and WebApp components are provided on the next page.

1. **DISPLAY-** Displays the WebApp data layers and user-added components such as drawings and measurements.
   a. App State- When you open a WebApp a 'pop-up' may appear in the lower right corner. If desired, click the message to restore the map extent and layers visibility where you left off (if applicable).
      i. *IT IS IMPORTANT TO NOTE that layer's visibility restoration only applies to default layers in the WebApp and NOT those added using the Add Layer(s) tool.*
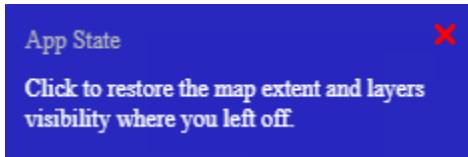
2. **TITLE**- Simply displays the title of the WebApp.

3. **TOOLBAR-** Contains the tools that you are able to use in the WebApp. The actual tools available on your WebApp may differ from what you see in the image below. All tools are detailed below.

IT IS IMPORTANT TO NOTE that the tools in the toolbar open in a separate window ON TOP OF THE WEBAPP. You can only view one tool at a time inside this window. ***For tablet and smartphone users this may significantly, or completely, obscure the WebApp display.*** At the top right of the window, you can click the minimize ⏶ button to minimize the window and see the display ***while still keeping the tool active***. You can click the maximize ⏷ button to maximize the window and view the full tool options after it has been minimized. Alternatively, you can click the close ❌ button on the top right of the window to ***close or deactivate the tool.***

   a. **LAYER LIST-** Click on this tool to bring up the layer list (legend). This will display all of the data sets contained In the WebApp. There are a variety of options available for the layer list tool. Important notes regarding these options are below:
      i. Check ☑ or uncheck ☐ the box to the left of the layer name to toggle layer visibility.
      ii. Click the ⮛ button to the right of the "Operational Layers" heading in order to Turn All Layers On or Off as well as Expand or Collapse All Layers.
      iii. Click on the layer *heading* or *name* to collapse (hide) or expand (view) the sub layer information.
      iv. Click the **...** button to the right of the layer *heading* or *name* to view additional options (please note that not all options may be available depending on the layer):
         ➢ Zoom to- This allows you to zoom to the full extent of that layer.
         ➢ Transparency- This enables a slider that allows you to set the transparency of that layer.
         ➢ Set Visibility Range- This allows you to set the visibility range on a layer.
         ➢ Enable/Disable Pop-up- This will remove the informational popup for that layer.
         ➢ Move up/down- This allows you to move data layers above or below other layers.
         ➢ View Attribute Table- This will open the attribute table for this layer.
         ➢ Description- This allows you to view detailed information regarding the layer (service) and click a link to view full metadata.

a. **BOOKMARK-** Click on this tool to go to specific locations based on pre-defined bookmarks.

   i. Click on the bookmark to go to that extent.

   ii. To create a new bookmark- Zoom to your area of interest, click the **Add** button and add a name in the text box. Your bookmark will be added to the bottom of the list.

      ➢ *IT IS IMPORTANT TO NOTE that your custom bookmark will remain in that particular WebApp, and on that particular machine/device, as long as you do not clear your browser history.*

   iii. To delete a bookmark- Click the pre-defined bookmark and click the ✕ button.

   iv. To edit the thumbnail image of the bookmark in the desktop (cards) view- click the ✏ button and select a new image.

   v. To edit the name of the bookmark in the desktop (cards) view- click the text and edit the name.

   vi. To edit the name of the bookmark in the mobile (list) - click the ✏ button and edit the name.

   vii. To share a particular map extent with someone else, use the Share Tool (see below).

c. **DRAW & MEASURE-** Click on this tool to draw and measure using various geometries. Please be sure to set all of your options (colors, styles, etc.) prior to beginning your drawings. *IT IS IMPORTANT TO NOTE that your custom bookmark will remain in that particular WebApp, and on that particular machine/device, as long as you do not clear your browser history.* Important notes regarding the options are below:

   i. **Add a drawing**

      ➢ Select drawing mode- There are several different ways to draw lines and areas. Hover over an option to see the description for each mode.
         ▪ *Of particular importance are the Freehand Polyline and Polygon options which will allow you to simply trace with your cursor or finger.*
         ▪ Choose a drawing mode, add a name and description, and change the symbology as desired, and draw features on the WebApp.
            o Symbology- There are several color, style, and size, etc. options available for the symbol and label properties.
               – *Of particular importance is the Transparency option which will allow your markups to be transparent so that you can see the information that lies underneath them.*
            o Pay attention to the tooltips to assist in drawing features.
            o Enter a name and description if desired.
      ➢ Show Measurements- Checking this box will display measurements of line and polygon features drawn on the WebApp.
         ▪ Be sure to select your area and distance units appropriately.

   ii. **Drawings List**

      ➢ You can select a drawing by checking the box to the left of the drawing name, ✎ update, ✕ delete, ▲ move a drawing up or ▼ down in the drawing order or 🔍 zoom to a drawing.
      ➢ At the bottom of the tool there are additional options to 🔍 zoom to, ▣ copy, ✕ delete, ⬆ export and ⬇ import selected drawings.

d. **IDENTIFY**- Click on this tool to bring up the Identify menu. You can identify features on the WebApp by a variety of points, lines, or polygons.

  i. Click the drop-down arrow to the right to select a particular layer to identify from.
     - ➢ Select the geometry (from a variety of points, lines, or polygons) that you will use to select layers.
     - ➢ Draw your point, line, or polygon on the WebApp to identify features.
  ii. Your results will automatically appear in the results tab.
     - ➢ If you click on a result in the "Results" window it will zoom to the selected feature.
     - ➢ Click the "Clear" text on the results tab to clear your identify results if desired.
     - ➢ Click the ✖ button to remove a particular result if desired.

e. **SHARE**- Click on this tool to share the WebApp link and extent ONLY with others. Click on the appropriate icon at the top to share using ✉ Email, 🇫 Facebook or 🐦 Twitter. Alternatively, you can copy the text under the following headings to share or embed the WebApp:

  i. "Link Options"- Click to view additional settings related to sharing a link.
  ii. "Embed Options"- Click to view additional settings related to embedding the WebApp in another webpage.

f. **ADD DATA-** Click on this tool to add layers to the WebApp. There are three ways this can be accomplished.

  i. Search tab- Click the "MRMapper Portal" text to change the layer source to "ArcGIS Online" or "My Content" (if you are logged in to ArcGIS online or Portal for ArcGIS) if desired. You can search for available layers or scroll through the list below. Additionally, you can:
     - ➢ Click the 🔵 toggle button next to "Within map" to search only layers within the map area (default) or alternatively search all layers in the scope.
     - ➢ Filter data by the type of data set by clicking the drop-down next to "Type".
     - ➢ Sort the data by several options by clicking the drop-down next to "Title."

     When you have found the data set you desire click "ADD" to add the layer to (alternatively click "REMOVE" to remove the layer from) the map or click "DETAILS" to view additional information about the layer.

  ii. URL tab- If you have the URL of a layer select the "Type" of service, enter the "URL" below and click add to add this layer to the WebApp.
  iii. File- If you would like to add your own data to the WebApp drag-and-drop the data or click browse to navigate to/select and add the layer to the WebApp. Layer types include Shapefiles (contained in a ZIP file), CSV, GPX or GeoJSON
     - ➢ Please note that this is limited to 1000 features per data set.
  iv. Click the ⬢ LAYERS button to view all layers added to the map using the Add Layers tool.

g. **BASEMAP GALLERY-** Click on this tool to change the basemap in the WebApp. Select the desired basemap to change the current basemap.

  i. IT IS IMPORTANT TO NOTE that not all basemaps are visible at all scales.

h. **GO TO LOCATION-** This tool will allow you to go to a location by providing a street address or coordinates. Alternatively, you can click on the map to determine the address of a particular location. Important notes regarding this tool are below:

   i. Address- Enter the address AND community and/or ZIP code in the text box below and click "Locate". The WebApp will automatically zoom to the best match and show a list of alternative addresses.
      ➢ Additionally, you may limit the search by the maps extent by checking the box below.

   ii. Coordinates- Choose the unit for the coordinates you will be entering, enter the Longitude (X) and Latitude (Y) and click "Locate". The WebApp will automatically zoom to that location.
      ➢ Use the Example below as a guide on how to enter the coordinates properly.

   iii. Inspector- Click the inspector button and then click on the street in the display to determine the approximate address and coordinates (in NAD 1983 StatePlane Massachusetts Mainland FIPS 2001) of that location.

   iv. Results popup- The results of your search will appear in a popup on the WebMap. Click the more button ▪▪▪ in the popup to see additional options such as "Pan to", "Add a marker", "Directions from Here" and "Directions to Here".

i. **DIRECTIONS**- Click on this tool to get directions. Important notes on using the tool are below:

   i. Enter a beginning and ending address or location:
      ➢ Manually enter an address or place, or
      ➢ Click ⊙ "Find my location" (visible when you hover over the text entry line), or
      ➢ Click ▯ "Add stops by clicking on the map…" (active by default)

   ii. Optionally, click ⚓ "Barriers" to add barriers on roadways and re-route your directions.

   iii. Optionally, click "ADD" to add additional stops if desired.

   iv. Optionally, choose the route type (Driving Time, Walking Time, etc.) by clicking the drop-down arrow to the right of the "Driving Time" option.

   v. Optionally, click "OPTIONS" to "Return to start", "Use traffic" or change distance units.

   vi. Optionally, click "LEAVE NOW" to select "Depart At" or "Time Unspecified" if desired.

   vii. Optionally, click ↑↓ "Reverse directions" to reverse your current directions.

   viii. Click "GET DIRECTIONS" to generate your route.
      ➢ Optionally you can print the route by clicking the print 🖨 button.

j. **PRINT-** Click on this tool to bring up the print menu. There are a variety of options available for the print tool. Important notes regarding the options are below:

   i. IT IS IMPORTANT TO NOTE that pop-ups must be enabled for this tool to work.

   ii. Map Title- Enter a title for the map.

   iii. Layout- You can choose from a variety of layout options that will include a data frame, legend, north arrow, title, disclaimer, and scale bar to your map. Selecting "MAP_ONLY" will export and print ONLY the WebApp image contents.

   iv. Format- You can choose from a variety of formats to export your map to.

   v. Advanced- This allows you to set additional advanced options such as map scale/extent, author, and print quality.
      ➢ *Please note that adjusting the DPI settings above the default will cause the print job to render slowly or not at all if it is too high.*

vi. <u>Print-</u> Clicking this button will create the desired PDF or map image. Once the export has completed you will see an icon with your map title. You can click on the map to open it in another web browser tab. This map can then be printed or saved.

k. **ABOUT-** Click on this tool to view additional information about the WebApp. This contains information regarding data sources, a link to the user manual and contact information.

l. **USER MANUAL-** Click on this tool to access the user manual.

m. **ENHANCED SEARCH-** Click on this tool to perform enhanced searches of data, typically Tax Parcels. Important notes on using the tool are below:
   i. There are three different ways to search. *Please note that not all these options are available on all WebApps*:
      ➢ By Value (default)
         ▪ If applicable, select a "Search Layer" by clicking the drop-down menu.
         ▪ Optionally, click the drop-down menu to the right of the layer name to optionally select (1) Create new results, (2) Add to current results or (3) Remove from current results.
         ▪ Select a "Search Alias".
         ▪ Specify parameters.
            ○ Click the drop-down menu to select a value or enter the text in the text box below.
         ▪ Click the "Search" button to perform the search.
            ○ Your search results will display in the "Results" tab.
               – Click the record in the window below to zoom to that record and highlight it in the WebApp.
               – Search results will also be displayed in the Attribute table (see below).
      ➢ By Shape
         ▪ If applicable, select a "Search Layer" by clicking the drop-down menu.
         ▪ Optionally, click the drop-down menu to the right of the layer name to optionally select (1) Create new results, (2) Add to current results or (3) Remove from current results.
         ▪ Choose the geometry type you would like to use to run the search under the "Select Features By" section.
            ○ Draw your feature(s) on the web app and click the "Search" button.
               – Your search results will display in the "Results" tab.
                  · Click the record in the window below to zoom to that record and highlight it in the WebApp.
               – Search results will also be displayed in the Attribute table (see below).
         ▪ Additionally, you may check or uncheck boxes to:
            ○ Enable multi-part graphics.

- o Add search tolerance to point selection.
- o Include text query (from the search "By Value" tab) in selection criteria.
- o Buffer Graphic.
  - − Optionally set your distance and units for the buffer.
- ➢ By Spatial
  - ▪ Set your distance and units to buffer your search results by.
  - ▪ If applicable, select a "Search Layer" by clicking the drop-down menu.
  - ▪ Click ✳ "Apply Buffer" to apply your buffer distance and units.
  - ▪ Click 🧩 "intersected by" to find the records intersecting your search; or
  - ▪ Click ✳ "entirely contained in" to find only the records that are completely within your search; or
  - ▪ Click 🧩 "intersect the envelope of" to find only the records that are completely within your search.
    - o Choose whether you want to use the "Buffer" or the "Selection" graphics in the pop-up window.
  - ▪ Your search results will display in the "Results" tab.
    - o Search results will also be displayed in the Attribute table (see below).
- ii. Results
  - ➢ Your search will display results in this tab. Scroll through to see the results.
  - ➢ Click the record in the window below to zoom to that record and highlight it in the WebApp.
  - ➢ Click the ▪▪▪ button at the top right to view additional results options such as "Zoom to", "Export to CSV file", "Export Search URL" (if available) and more.

n. **QUERY**- Click on this tool to perform parcel searches by Owner, Address or Parcel ID (or others as setup).
Important notes on using the tool are below:
- i. Parcel (or Other) Search
  - ➢ Select "Search by Owner", "Search by Address" or "Select Parcel ID" (or other search options as defined by the tool).
  - ➢ Enter the value in the box provided or click the drop-down arrow to the right to select a parcel (or record) if appropriate.
  - ➢ Click "Apply" below to run the search.
- ii. Search Results
  - ➢ Click a search result to zoom to that parcel (or record).
  - ➢ Click the more button ▪▪▪ at the top right to view additional results options such as "Zoom to", "Export to CSV file", "Export Search URL" (if available) and more.
  - ➢ Click the ☰↑ button to the right of the "Displayed Features" text to "Collapse all" or "Expand All" results.

o. **ABUTTER NOTIFICATION**- Click on this tool to create an abutters list spreadsheet or mailing labels PDF. Important notes on using the tool are below:

    i. IT IS IMPORTANT TO NOTE that pop-ups must be enabled on your web browser for this tool to work.

    ii. Enter Parcel ID, Address or Owner in the box (you must enter at least 3 characters for any search results to appear) and select the desired Parcel ID.

        ➢ Alternatively, you can select your desired parcel(s) by using the point, lines, and polygons selection tool below.

            ▪ Click either of the clear buttons to clear your current search.

    iii. Click the "Apply a search distance" checkbox.

        ➢ Optionally enter alternative search distance and units if applicable.

    iv. If desired, click the "Review" button if you would like to review/edit the results.

        ➢ Hover over "Select" to see instructions on how to "create new selection", "Add to selection" or "Remove from selection".

        ➢ Click the drop-down arrow to choose to select features (parcels) by point, polygon, line, or lasso (irregular polygon).

            ▪ Follow the onscreen tips/instructions on your chosen method.

    v. Choose the desired format (CSV or PDF labels) and click "Download".

p. **EDIT**- Click on this tool to create and edit data. Important notes on using the tool are below:

    i. To create new data:

        ➢ Select the symbol for the layer you wish to create data for. When properly selected, the symbol will have a light blue background to it.

            ▪ ***VERY IMPORTANT NOTE-***
            iPad and iPhone users MAY have to touch the symbol TWICE for the layer to be
            properly selected and appear correctly as shown above.

        ➢ **Smartphone users will, and tablet users may, need to click the minimize ⌃ button (as explained above) on the edit window to view the display and begin creating data. DO NOT CLOSE ✖ the edit window. If you do you will not be able to create data.**

        ➢ Now that you have properly selected the layer you can create the data by clicking or drawing with your cursor or finger on the display.

        ➢ After you have created a feature an attribute window will appear. You can add a comment for that feature that will appear when a user selects that piece of data. You may be able to add multiple pictures and/or video attachments by clicking the "Choose File" button under "Attachments" and following the appropriate prompts. Once you have completed filling out the attribute information click "Save" complete the feature creation.

            ▪ *For tablet and smartphone users- you may need to allow your web browser to access your camera and photos to add attachments.*

                ▪ If you decide you wish to cancel the creation of a feature while you are editing, click the "Delete" button at the bottom of the attribute window.

                ▪ If applicable, you may be able to edit related database(s) by clicking ✎ under "Related tables:"

> ➢ For each new feature you wish to create, you will need to select or re-select the symbol for the layer you wish to create data for. If you have previously minimized the edit window you will need to maximize it by clicking the maximize ⌄ button.

  ii. To edit data already created:

>> ➢ ***First- you will need to click on the edit tool in order to edit data that has already been created.***
>> ➢ Smartphone users will, and tablet users may, need to click the minimize ⌃ button (as explained above) on the edit window to view the display and begin creating data. DO NOT CLOSE the edit window. If you do you will not be able to create data.
>> ➢ Once you have opened the edit tool select the feature you wish to edit, and the attribute window will appear. Similar to creating features you will now be able to add/edit comments and attachments or delete the feature completely.

  iii. ***VERY IMPORTANT NOTE- There are advanced editing options available at the bottom of the edit tool window. It is recommended you ignore these options WITH THE FOLLOWING EXCEPTIONS:***

>> ➢ Undo/Redo- Click undo ↩ or redo ↪ to undo or redo changes that you have made.

q. **MORE-** If you see this tool, it means that other tools are available but hidden from your view. ***This will be particularly prevalent when using the WebApp on a tablet or smartphone.*** Click on this tool to see the additional tools that are available to you.

4. **ATTRIBUTE TABLE-** Contains the attribute data for selected data layers in the WebApp. By default, the attribute table is 'hidden' at the bottom center of the WebApp. There are a variety of options available for the print tool. Important notes regarding the options are below:

  a. Click the ▲ Show Attribute Table to view the attribute table.

  b. Alternatively, click the ▼ Hide Attribute Table to hide the attribute table.

  c. If applicable, choose the tab for the data set that you desire.

  d. Click on the empty grid to the left of a record in the attribute table to select it and highlight it on the WebApp.

    i. You can hold down the 'Control' button on a keyboard (if applicable) to select multiple records at a time.

  e. Double-click a record in the attribute table to select it and highlight it **AND** zoom to it on the WebApp.

  f. Click on a record's field heading to sort it by ascending or descending order.

  g. Options (options will be 'greyed out' if they are unavailable).

    i. Click "Show Selected Records" to show ONLY selected records.

    ii. Click "Show Related Records" to show related records (if available).

    iii. Click "Filter" to filter records by adding "Filter Expressions" or "Filter Expression Sets".

    iv. Click "Show/Hide Columns" check or uncheck columns to show or hide particular ones.

    v. Click "Export to CSV" to export your attribute table records to an Excel compatible spreadsheet.

  h. Filter by Map Extent- Click this to filter records to only those that are within the WebApp extent.

  i. Zoom To- Click this to zoom to a selected record.

  j. Clear Selection- Click this to clear the currently selected records.

  k. Refresh- Click this to refresh the attribute table.

  l. Add/Remove Fields- On the far right of the field headings, click the ⊕ button and check or uncheck fields to make them visible or invisible.

5. **NAVIGATION CONTROLS-** Contains the tools that will allow you to quickly navigate through the WebApp.

   a. Click the ⊞ button to zoom in on the display.

   b. Click the ⊟ button to zoom out on the display.

   c. Click the 🏠 button to return to the default extent of the display.

   d. Click the ◎ button to "find my location"; click again (when green) to disable this feature.
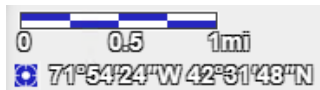
      i. ***IT IS IMPORTANT TO NOTE that this feature will work best on devices with GPS technology built-in (e.g., most tablets and smartphones). For other devices, this may zoom to the location of the internet host provider.***

   e. Click the ← button to zoom to the previous extent.

   f. Click the → button to zoom to the next extent.

6. **SCALE BAR & COORDINATES**

   ➢ **SCALE BAR-** Displays the scale of the WebApp in the English system.

   ➢ **COORDINATES-** Displays the latitude/longitude coordinates of the mouse cursor (for desktop applications) or last clicked location (for mobile applications) in WGS84 Degree Minutes Seconds.

      ▪ Click the ◎ button to enable the "click the map to get coordinates" feature; click again (when green) to disable this feature.

         o This functionality is disabled on mobile devices.