Appalachia United Outdoors

Decision Support Tool User Guide

October 2026

This guide covers the features of the Appalachia United Outdoors Decision Support Tool, an interactive web application for exploring community-level data across the 13-state Appalachian study area.

The tool allows users to visualize and query 36 variables organized under five goal categories, build custom weighted scenarios, generate multi-community reports, and run project impact analyses.



Outdoor Risks and Resources



Economic and Community Need



Recreation Need and Access



Outdoor Recreation Economy



Federal Funding Program Potential

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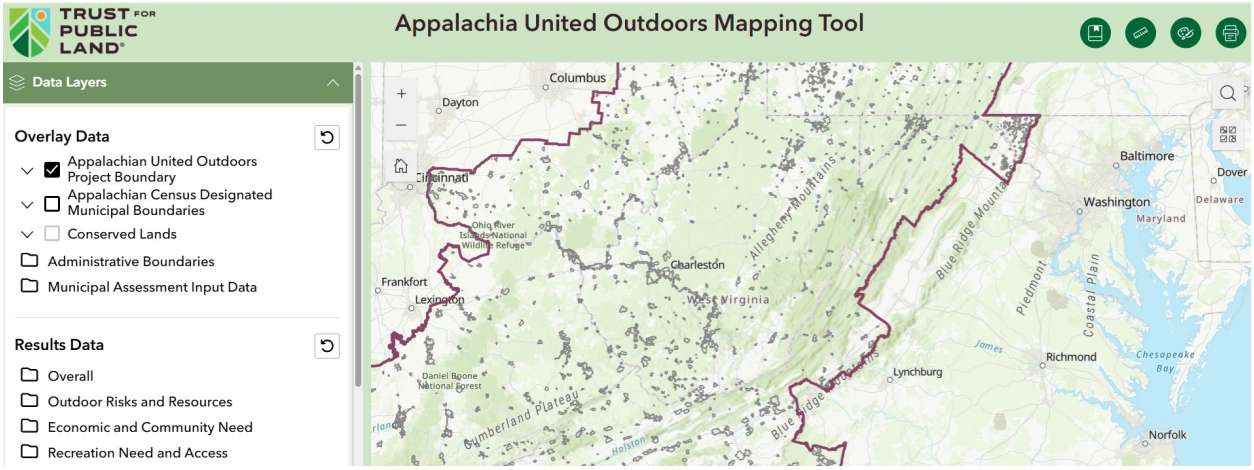
GETTING THERE

- From the Appalachian United Outdoors landing page, select Mapping Portal. Or use the provided link to access the web application, Appalachian United Outdoors Decision Support Tool.
- This Decision Support Tool will not require a login and password.
- **Note: Mozilla Firefox, Edge, Safari and Google Chrome work best for this mapping site.**
- This New DST works best on computer browsers but should also work adequately on tablets and phones.



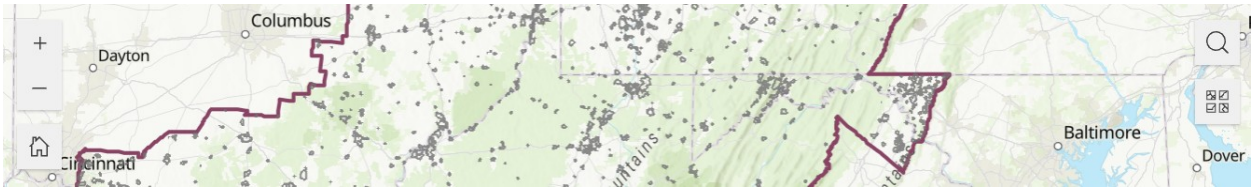
CATALOG OF BASIC MOVES

- Change the viewer extent
- Search
- Change the map background (Basemap)
- Data Layers
    - Overlay Data
    - Results Data
- Custom Scenario
- Search the Data
    - Query by Attribute
    - Query by Spatial Location
- Group Report
- Project Impact
    - Top Bar Navigation Menu
        - Get information about specific features
        - Add bookmarks
- Measurement
    - Draw, add graphics to your map
    - Print a custom map

THE BASIC MOVES

Change the viewer extent

- There are several ways to pan and zoom the map.
  - Pan
    - → Click the left mouse button and drag your mouse across the map.
    - → Hold the shift key and use Arrow keys.
  - Zoom
    - → Move your mouse over the zoom location and use the scroll wheel to zoom in or out.
    - → Hold down the Shift key, click your mouse on one corner of the desired extent, and drag your mouse to the opposite corner of the desired extent.
    - → Click the (+) or (-) buttons in the upper left corner of the map.
    - → Hold down the Shift key and press the (+) or (-) keys.
- As you change the viewer extent the map detail changes and some layers can turn off or on.
- Click the button to return to the original extent.



Search

- To zoom to a specific location, click the button in the upper right corner of the map.
  - Enter an address, place name, zip code, county, etc. in the search box.
  - Select the correct search item from the search list.

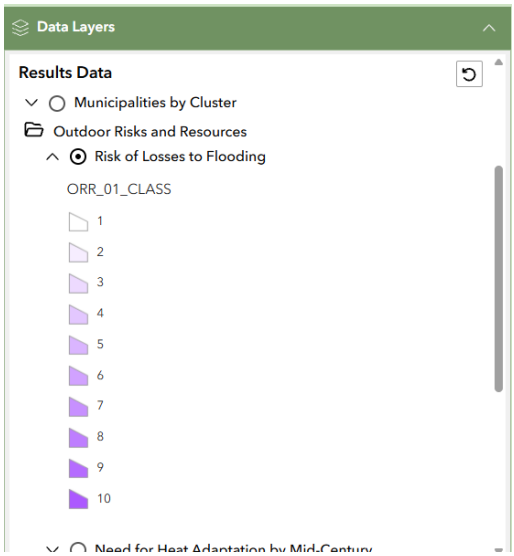
Change the map background (Basemap)

- Click the button in the upper right corner of the map.
- A drop-down panel will appear.
- Click the basemap you prefer.
- Hover your mouse over each basemap for more information.
- Click the (x) to close the dialog box.

Data Layers

- Turn on and off the thematic overlay GIS layers for the project.
- This functionality is found in the Data Layers expanding panel to the left of the map.
- Click on Data Layers Data Layers to expand the layer categories.
- At the top of the layers list there is an option to reset the default layer visibility . Click this to return to the original layer visibility.
- Each symbol indicates that there are multiple layers grouped under that heading. Click the to expand and see what layers there are.
- Click to show the symbology for an individual layer.

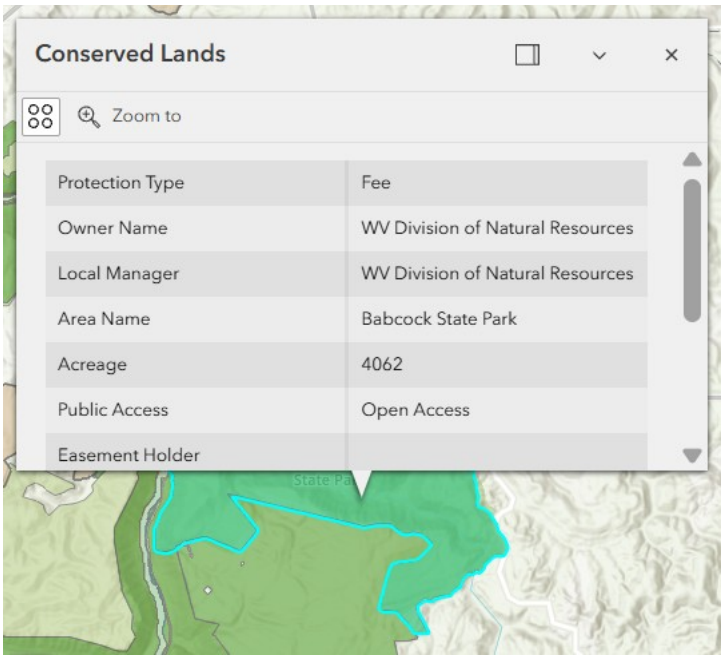
- Hover your mouse over a data layer to obtain additional information on the layer.
- **Results Data** layers, grouped by goal (Outdoor Risks and Resources, Economic and Community Need, Recreation Need and Access, Outdoor Recreation Economy, and Federal Funding Program Potential), are displayed in a separate layer category.
- Results data layers are displayed like other data layers, but they often have radio boxes that only allow one layer to be viewed at a time.

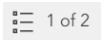


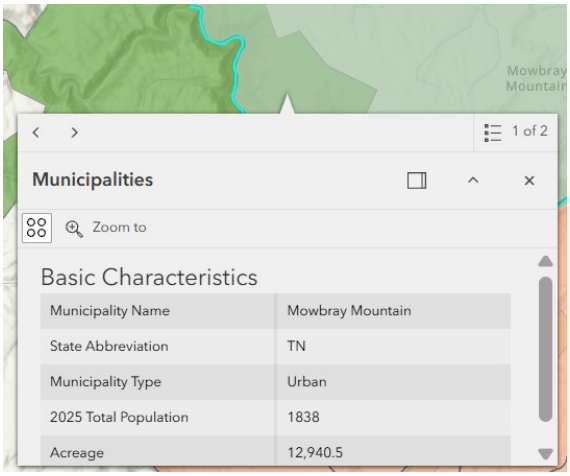
- For additional information on Overlay Data and Results Data, a link to the Data Description document is provided in the Information button in the upper right header button bar, .
- This link directs you to a pdf document (second link) titled that lists layers, analysis methodology, and data sources.

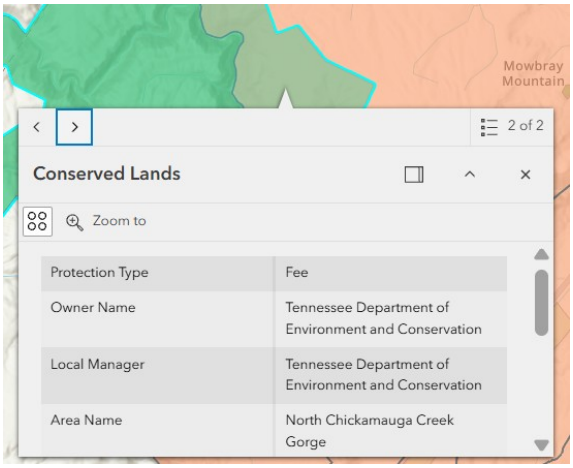
Get popup map information about specific map features

- Turn on a GIS Data Layer.
- Click on a map feature on the map.
- The selected feature will be highlighted on the map and an information box will appear that describes the feature(s) that you clicked.
- To dock the popup box in the corner of the map, select .
- To undock this popup box, select .

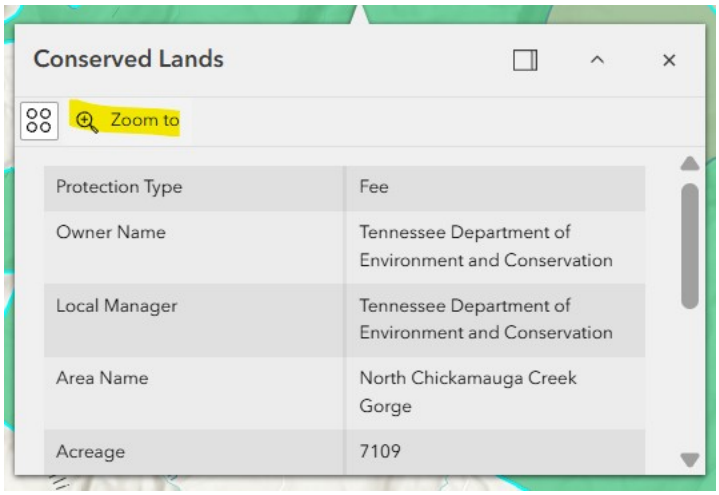


- **Note: multiple map features can be identified at one time.**
- **Note: If you have multiple layers on, the one that is highest in the table of content will be identified first.**
- If there are **<** **>** and  in the information box title bar, you have identified multiple features. Click **>** to view information on the other selected. Or select  to show attributes for and highlight on the map a specific feature.



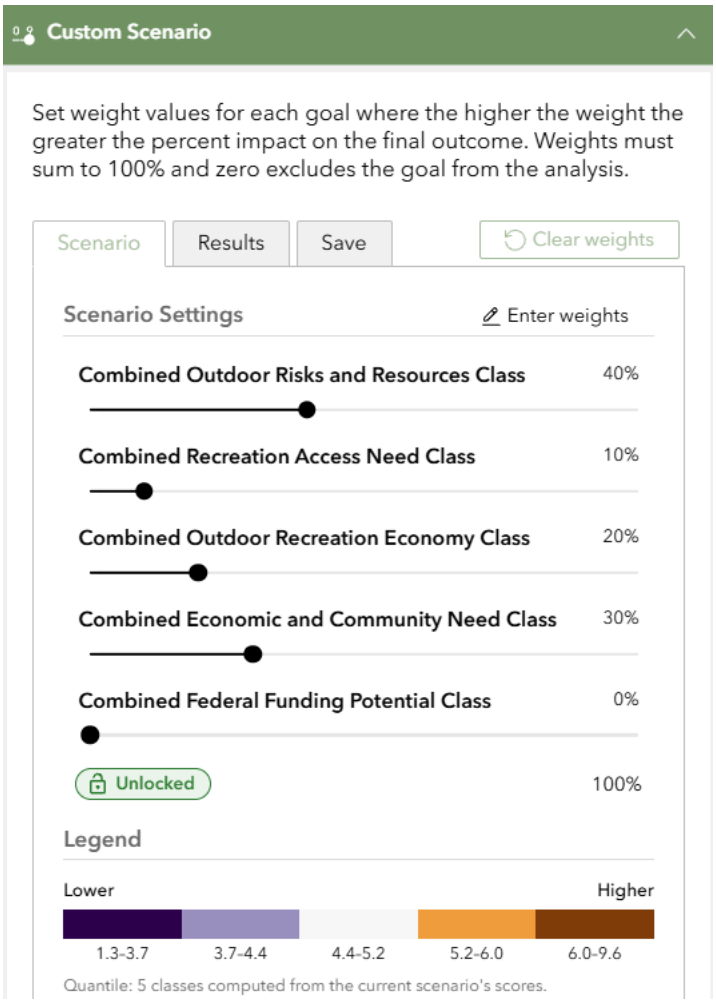


- There is additional popup functionality in the bar between the heading and the popup values. Click on magnifying glass to zoom to parcel.

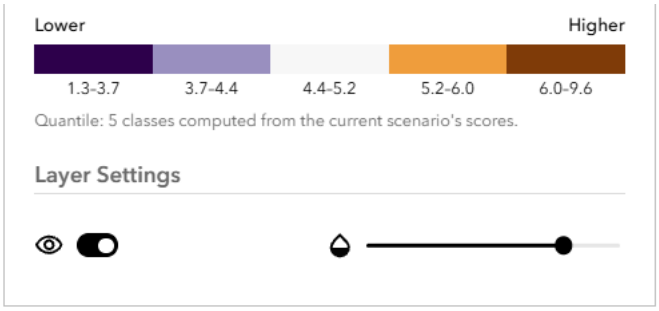


Custom Scenario

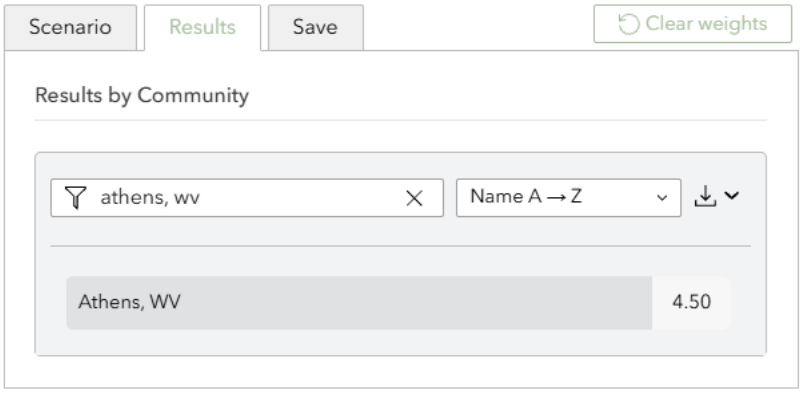
- Set weight values for custom scenario.
- Open Custom Scenario tool, Custom Scenario.
- In the Scenario tab, set weight values for each goal (Outdoor Risks and Resources, Recreation Access Need, Outdoor Recreation Economy, Economic and Community Need, and Federal Funding Potential). The higher the weight, the greater the percent impact on the final income. Weights must sum to 100% and zero excludes the goal from the analysis.



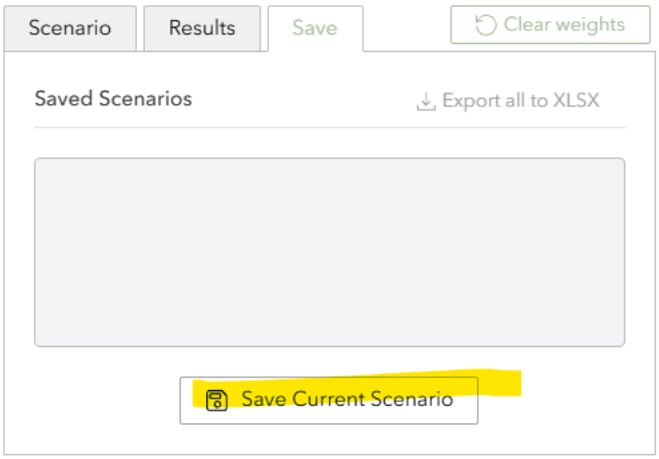
- Results generated by the Custom Scenario will appear on the map represented in 5 classes. Set visibility, , or adjust transparency, , of these using the Layer Settings located below the Custom Scenario Legend.



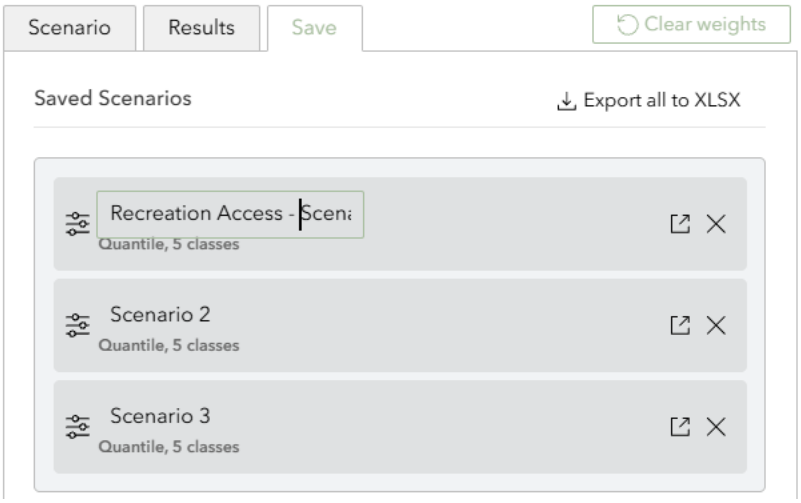
- After creating a custom scenario, results are available to search by Community Name in the Results tab. Select to download a table of the results as either CSV of XLSX.



- Save the current custom scenario by selecting Save Current Scenario under the Save tab. Multiple scenarios can be saved at once and exported as a XLSX.



- Select and highlight Scenario Title (ie Scenario 1) to rename. Select ⧉ to load scenario in the map viewer. Select ✕ to remove/delete a saved scenario.



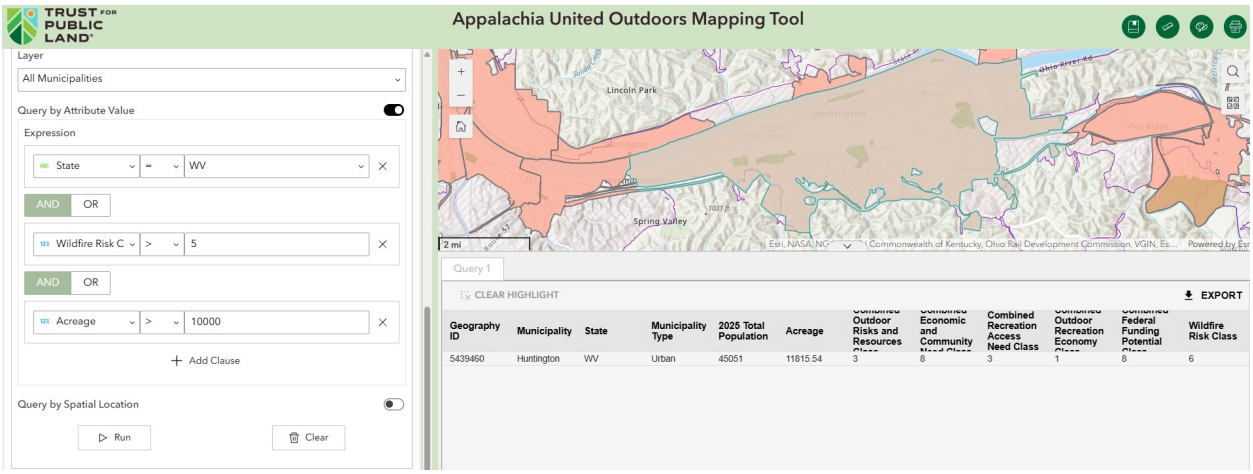
- To reset all Custom Scenarios to zero, select Clear Weights in the upper right hand corner, 

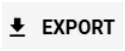
. This will not delete any saved scenarios.

Search the Data

- Search is usually setup on one or two layers, such as All Municipalities. Query can be configured by either attribute values (Basic Characteristics, Cluster Profile, Outdoor Riks and Resources, Economic and Community Need, Recreation Need and Access, Outdoor Recreation Economy, Federal Funding Program Potential) or by spatial location. Multiple queries can be done at a time by selecting **+New Query** and opening a new Query tab.
- *Query by Attribute Value:* In the Layer drop down menu, select All Municipalities. Include multiple clauses in search by selecting +Add Clause
    - Select Query by Attribute Value by pressing the toggle
      

    - *Example:* Query by Attribute Value with the following expressions: Basic Characteristics / State = VW ND Basic Characteristics / Acreage >10,000 AND Outdoor Risks and Resources / Flooding Risk Class > 5.
    - Click the Run button to execute the query.



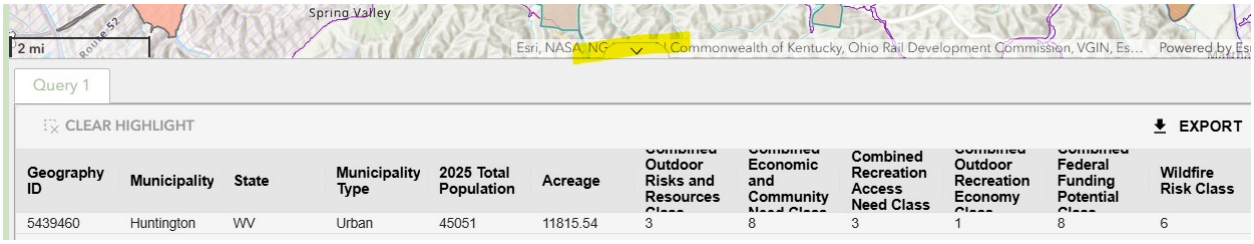
    - Query results will appear highlighted on the map and in a table below the map.
    - Select 

to download a copy of the table as a CSV or XLSX.
    - Click on records in the table to zoom to the clicked record.
    - Click CLEAR HIGHLIGHTED to unselect the zoom feature and resume the full view.
- *Query by Spatial Location:*
    - Select the toggle for Query by Spatial Location.
      

    - To set query location parameters, use Geometry Type tools and select Buffer Distance.

- Press to make the feature visible or invisible on the map.
- Press to erase the feature from the map.
- Press Run.
- Query results will appear highlighted on the map and in a table. Select EXPORT to download a copy of the table as a CSV or XLSX.

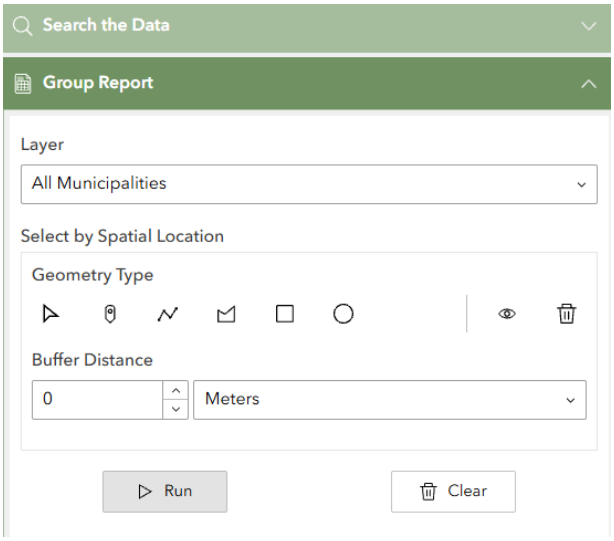
- Click the **Clear** button on the query window to undo the current query.
- Click the **Collapse** arrow above the query table to close the table window.



Group Report

- Generates a Multi-Municipality PDF report by clicking on up to ten municipalities in the map view, or spatial location tools and buffer distance input.

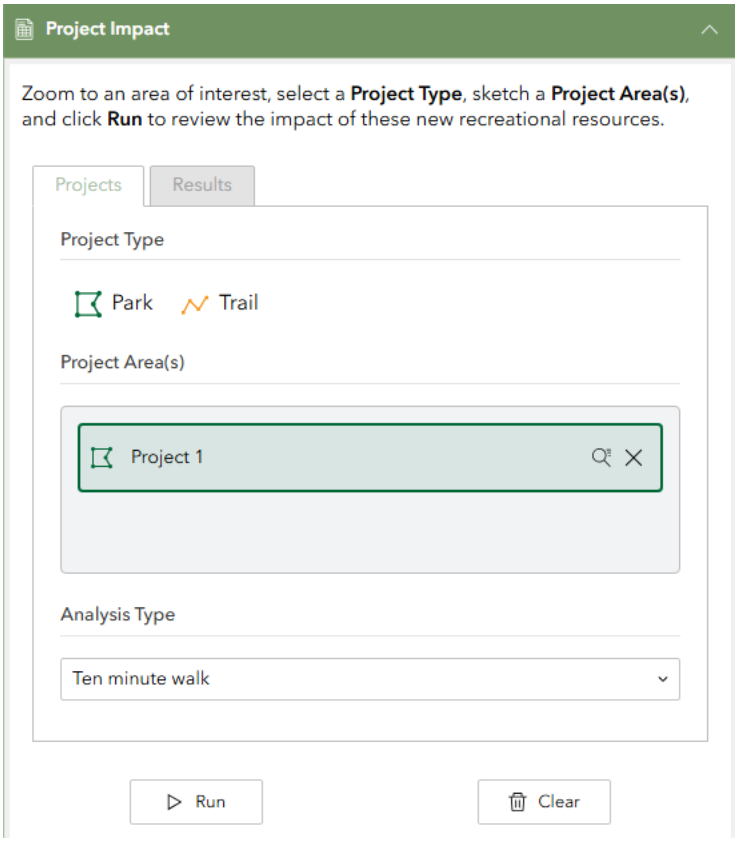
- Use the tools to select municipality(s). The leftmost Geometry Type button, , will allow you to manually pick municipalities by clicking on them. The Second-left button, , lets you pick a point on the map to buffer around.
- Select the Run button to generate a PDF report (this may take some time if multiple municipalities are selected). The report lists the selected municipality(s) and provides summarized analysis results for the individual priorities for each municipality.



Project Impact

- Run a custom walk, cycle or drive time Impact Report of a proposed project area.

- Pan and zoom to your area of interest.
- Under the Projects tab, use Project Type tools to digitize a project area on the map.
- Type in project name in the name field.
- Use the Zoom button to zoom to this area on the map.
- Multiple project areas can be assessed together.
- Press (X) to delete an area.



- Select a project impact analysis type from the Analysis Type drop down menu.
- Press Run to execute the analysis (will take several minutes).
- Analysis results will appear on Results tab.
    - Select the ^ button next to each to expand and view the results tables.
    - On the map, orange access points will appear around the project area and the Service Area will be shown in yellow.
- Press Download, Download , to save the report (pdf) or analysis shapefiles.
- Press Clear, Clear , to close results and return to the project area.

Top bar navigation menu

Information

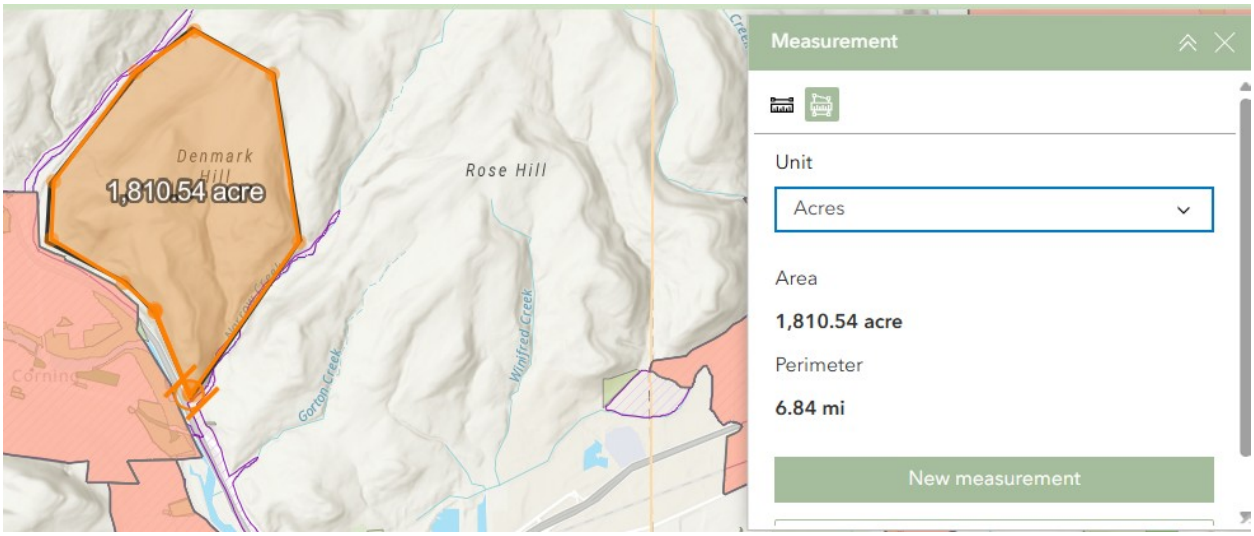
- Opens a dialog box with links to additional project information.
    - Project Landing Page

- Goal and Criteria Matrix
- Decision Support Tool User Guide

- Bookmark tool to add saved reference locations or map Bookmarks.
- To add a Bookmark zoom to the desired map extent and click +. Enter a title for the location. At any point you can open the Bookmark tab and revisit your location bookmarks.

Measurement

- Distance and area measurement tools with a dropdown list of measurement units to select from.



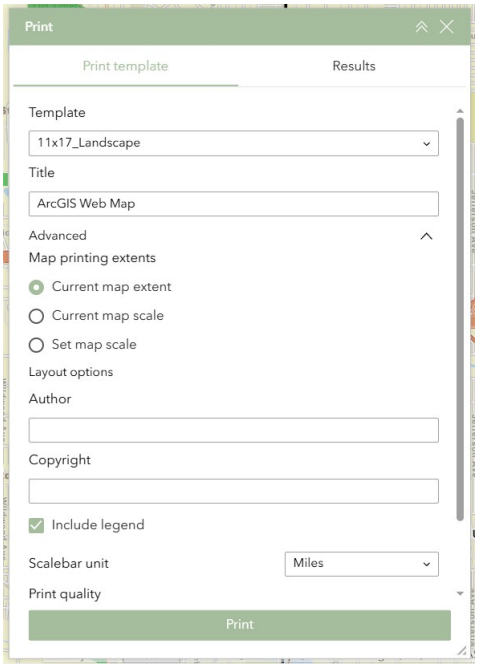
Draw

- Select from several annotation tools to add graphics to your map. The Draw tool allows you to create points, circles, polylines, polygons (standard and freehand) within the mapping panel.
- To sketch a polygon on your map, click the button.
- Select polygon color, outline, and % transparency. Begin sketching a shape on your map by clicking on your map. Double click to finish the sketch. To re-select the shape and either duplicate or delete, press the button. Select and drag to reposition a duplicated shape.
- You can also add text, points, lines, circles, rectangles, and freehand polygons to the map by using the other draw buttons.
- If you want to change (delete) the graphics, use the button, and recreate the graphics using the methods described above.
  - **Note: This action will erase all your drawings**
- To stop drawing click the **X** button

- Annotations are included when using the print tool described below to create a printed map.


Print

- On the **Print Template** tab, select template dimensions from dropdown menu and add title.
- Advanced options also available for selecting map extent, print quality, including author and copyright, legend, and attributes.
- Click the Print button once you have completed selections from the provided options. Be patient while the mapping site generates a map for you. This process can take up to a minute.
- In the **Results** tab, a file will appear once the export is complete. Click on the link to open your map.
- A formatted map will be displayed that you can print or save to your computer hard drive to share with others.
- Close the export window.



Get help

- Contact Mitchel Hannon at The Trust for Public Land, Geographic Information Systems team (mitchel.hannon@tpl.org) for assistance.