

# Trust for Public Land

## Climate-Smart Cities Richmond

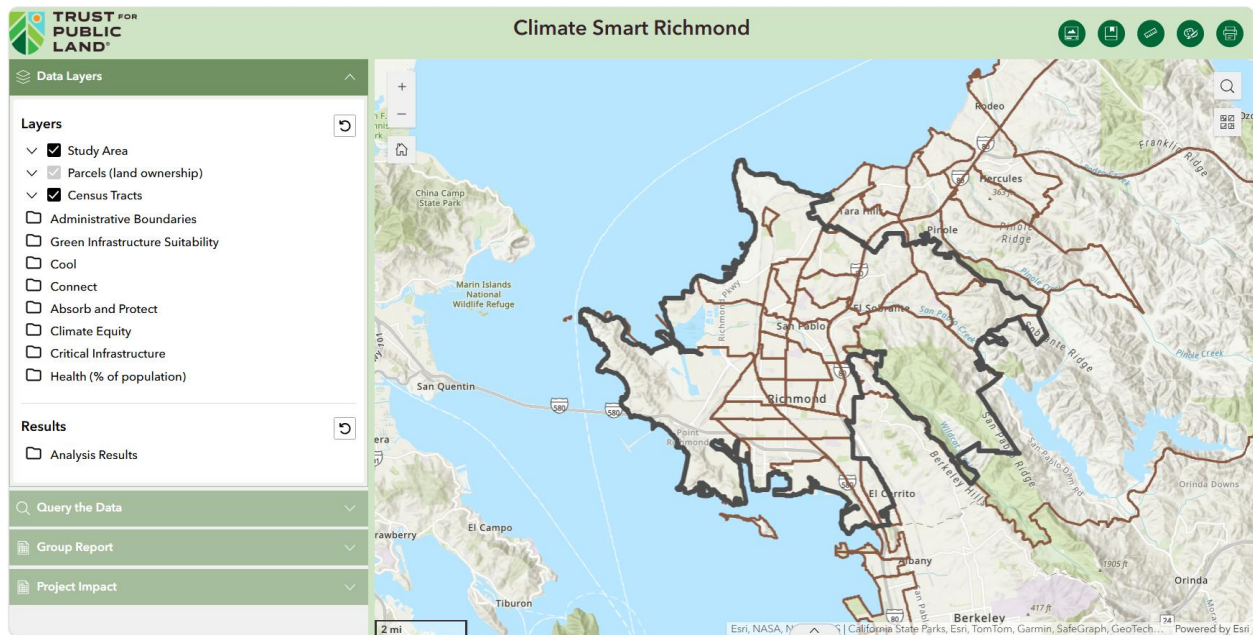
### Decision Support Tool

#### User Guide

June 2026

#### GETTING THERE

- Use the provided link to access the web application, [Climate-Smart Cities Richmond : Planning and GIS](#).
- Some Decision Support Tools require a login and password.
  - TPL staff will instruct you on login requirements.
- **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.



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## 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.

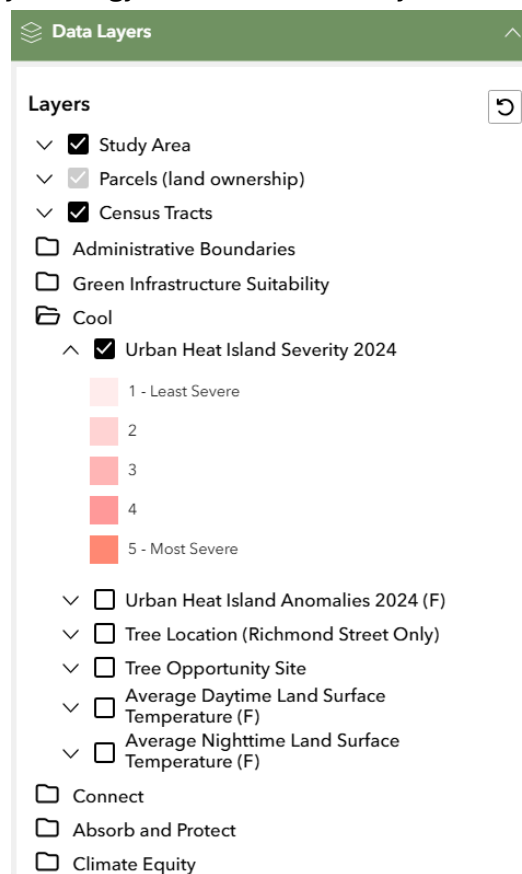
### Change the map background (Basemap)

- 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.

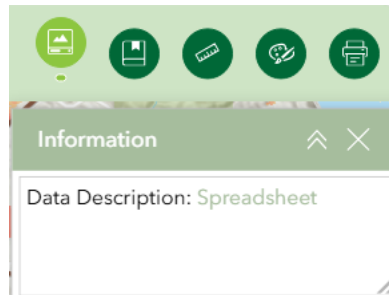
## Additional map Data Layers

- 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  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.
- **Analysis Results** data layers are often displayed in a separate layer category.
- Analysis Result 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 data and Analysis Results, a link to the Data Dictionary document is provided in the Information button in the upper right header button bar, .

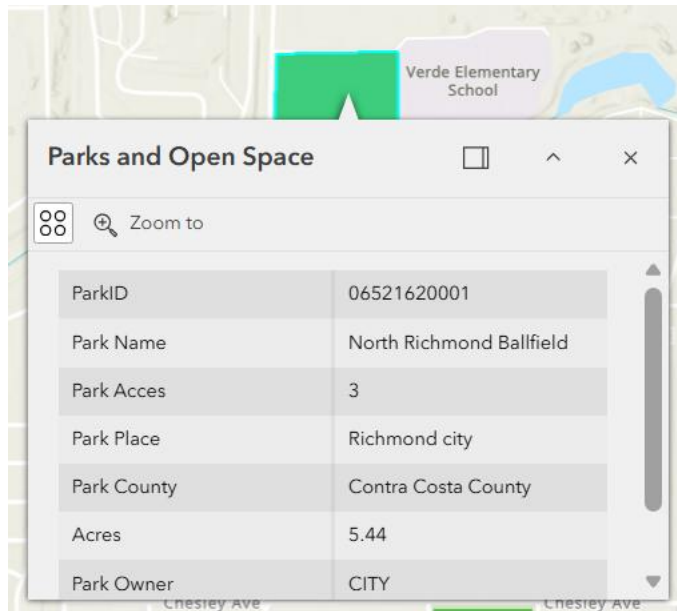


This link directs you to a table (second tab) titled Analysis Results that lists layers, analysis methodology, and data sources.

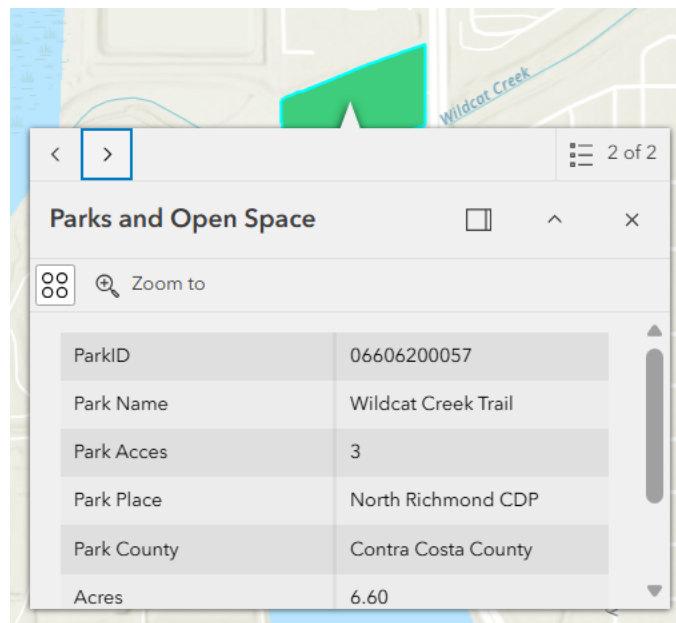
|   | A                                                                                                                               | B                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | C                                                                                      |
|---|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1 | Note: this table is formatted so that the table can be downloaded and printed on 8.5 X 11 paper using the landscape orientation |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                        |
| 2 | <b>Analysis Results</b>                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                        |
| 3 | <b>Layer Name</b>                                                                                                               | <b>Methodology</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>Data included/Source</b>                                                            |
| 4 | <b>Overall Stacked Priorities</b>                                                                                               | This is the result of the Greater Chicago Natural Solutions Overall Stacked Priorities analysis. This result is designed to identify where green infrastructure can be expected to benefit multiple green infrastructure objectives from the Greater Chicago Natural Solutions Tool Project for Chicago.<br><br>The Overall Stacked Priorities result were created using a equally weighted sum on the 6 goal results which included: Agriculture, Healthy, Equitable, | Trust for Public Land + Greater Chicago Natural Solutions Tool Technical Advisory Team |
| 5 | <b>Healthy</b>                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                        |
|   |                                                                                                                                 | This model identifies areas with higher temperatures in the Chicago planning area. Median temperature was calculated using Landsat 8 (Band                                                                                                                                                                                                                                                                                                                             | Landsat 8, Band 10 courtesy of the US Geological Survey                                |

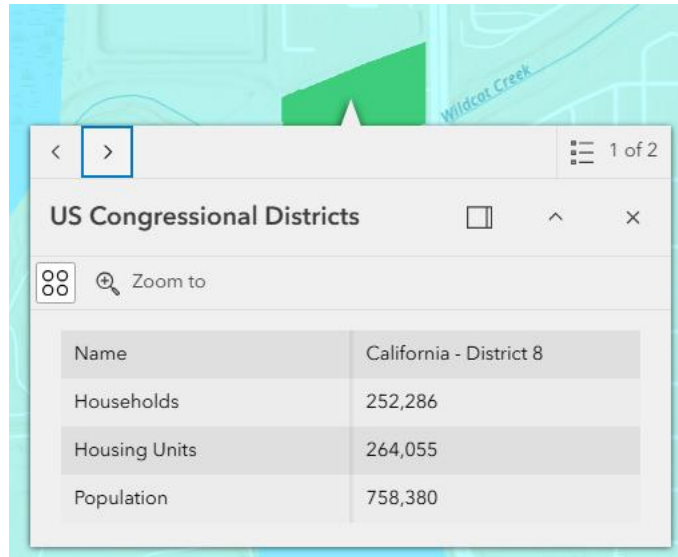
## Get popup map information about specific map features

- 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 .

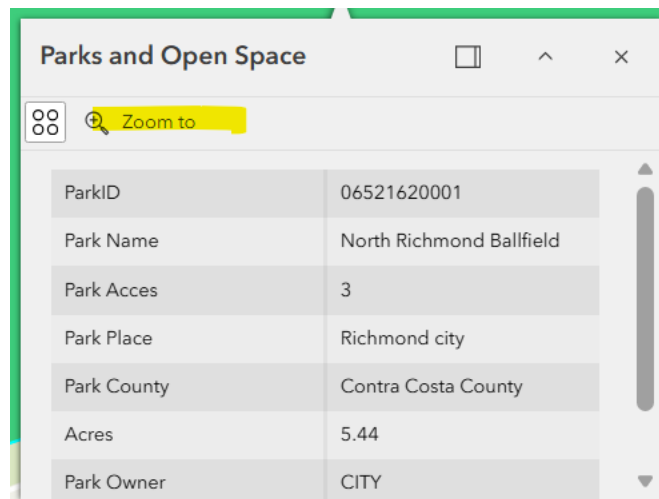


- **Note: multiple map features can be identified at one time.**
- **Note: If you have multiple layers on, the one that is highest in the table of content will be identified first.**
- If there are < > and  in the information box title bar, you have identified multiple features. Click > to view information on the other selected. Or select  1 of 2 to show attributes for and highlight on the map a specific feature.

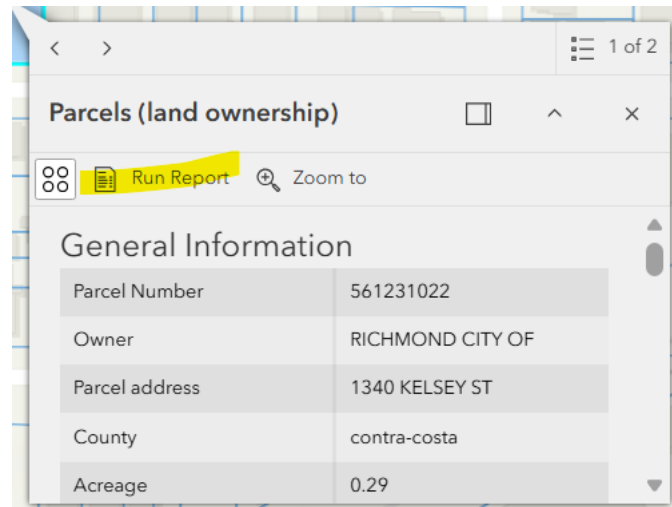




- There is additional popup functionality in the bar between the heading and the popup values.



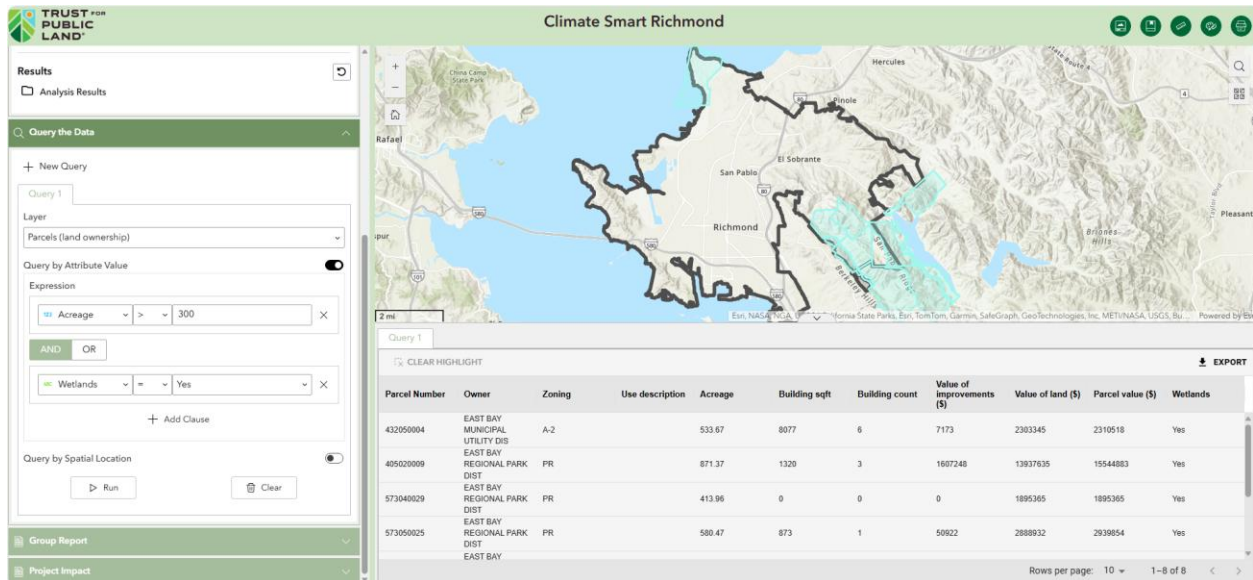
- If PDF Reports are configured for a layer then you can create individual reports from the Run Report button on the popup window.



## Query the Data

Query is usually setup on one or two layers, such as Parcels (land ownership). Query can be configured by either attribute values (parcel ID, owner, address, size, or Chicago Community Area) 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 Parcels (land ownership). Include multiple clauses in search by selecting +Add Clause
  - Select Query by Attribute Value by pressing the toggle  
Query by Attribute Value ☒
  - *Example:* Query by Attribute Value with the following expressions: Acres > 300 AND (+Add Clause) Absorb / Protect Priority Wetlands = Yes .
  - Click the Run button to execute the query.



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

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.

## Group Report

Generates a PDF report based on the layer selected, usually Parcels, by spatial location tools and buffer distance input.

- Use the tools to select parcel(s).
- Select the Run button to generate a PDF report (this may take some time). The report lists the selected parcel(s) and provides summarized analysis results for the individual priorities for each parcel.

The screenshot shows a web-based interface for generating a report. It has three main sections: 'Data Layers', 'Query the Data', and 'Group Report'. The 'Group Report' section is active and contains a 'Layer' dropdown menu set to 'Parcels (land ownership)'. Below this is a 'Select by Spatial Location' section with a 'Geometry Type' row of icons (point, line, polygon, etc.) and a 'Buffer Distance' section with a numeric input set to '0' and a unit dropdown set to 'Meters'. At the bottom are 'Run' and 'Clear' buttons.

- If PDF reports are configured for a layer then you can also generate individual feature reports from the feature popup window.

The screenshot shows a feature popup window titled 'Parcels (land ownership)'. It has a 'Run Report' button highlighted in yellow and a 'Zoom to' button. Below the buttons is a 'General Information' section with a table of details for a specific parcel.

|                |                  |
|----------------|------------------|
| Parcel Number  | 561231022        |
| Owner          | RICHMOND CITY OF |
| Parcel address | 1340 KELSEY ST   |
| County         | contra-costa     |
| Acreage        | 0.29             |

## 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.

The screenshot shows the 'Project Impact' web application interface. At the top, a green header bar contains the title 'Project Impact' and a small upward arrow icon. Below the header, a light gray box contains instructional text: 'Zoom to an area of interest, select a **Project Type**, sketch a **Project Area(s)**, and click **Run** to review the impact of these new recreational resources.' Below this text are two tabs: 'Projects' (active) and 'Results'. The 'Projects' tab displays a form with the following sections: 'Project Type' with icons for 'Park' (green) and 'Trail' (orange); 'Project Area(s)' with a search bar containing 'Project 1' and a magnifying glass icon, and a list of project areas (currently empty); and 'Analysis Type' with a dropdown menu set to 'Ten minute walk'. At the bottom of the form are two buttons: 'Run' (with a play icon) and 'Clear' (with a trash icon).

- 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.
  - Data dictionary
  - This instructional document



### 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.

The screenshot shows the 'Print' dialog box in ArcGIS, with the 'Print template' tab selected. The dialog has a green header bar with 'Print' and window controls. Below the header, there are two tabs: 'Print template' and 'Results'. The 'Print template' tab contains the following settings:

- Template:** A dropdown menu showing '11x17\_Landscape'.
- Title:** A text box containing 'ArcGIS Web Map'.
- Advanced:** A section header with a collapse/expand arrow.
- Map printing extents:** Three radio button options: 'Current map extent' (selected), 'Current map scale', and 'Set map scale'.
- Layout options:** A section header.
- Author:** An empty text box.
- Copyright:** An empty text box.
- Include legend:** A checked checkbox.
- Scalebar unit:** A dropdown menu showing 'Miles'.
- Print quality:** A label for the 'Print' button.

A large green 'Print' button is located at the bottom of the dialog.

## Get help

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