EXERCISE I -

The purpose of this exercise is to help users navigate SCA-CPT alpha and perform MCDA simulation. The MCDA simulation ranks each proposed area of conservation based on 100,000 different combinations of weighted goals. The second exercise will allow you to rank each proposed conservation area according to the priority metrics and attributes which are important to you (your organization).

1) Make sure your computer is connected to the internet.
2) Navigate to the web URL provided to you (right pocket on your folder) using any web browser.
3) The home screen should appear (Figure 1).

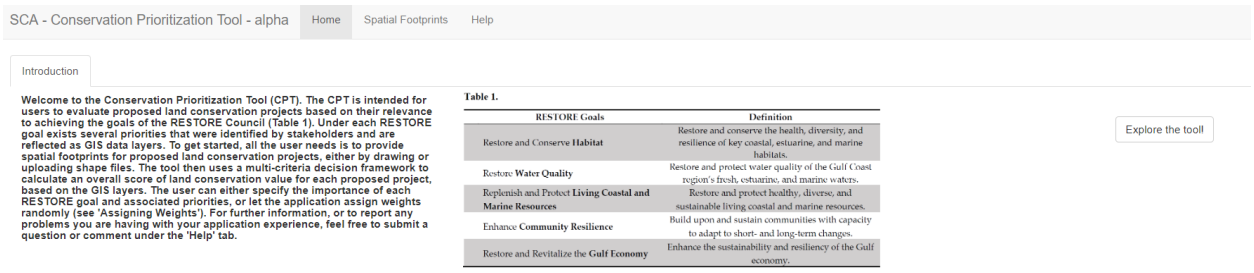


Figure 1. Home Screen of SCA-CPT alpha tool

4) To begin exploration of the tool, click the 'Explore the Tool' button on the right hands side of the home screen.
5) The Specify Project Footprints tab (Figure 2) allows users to select options to analyze conservation projects.
   The options include a) option to either draw a spatial project footprint or upload an ESRI supported shapefile, b) the number of conservation projects you wish to analyze.

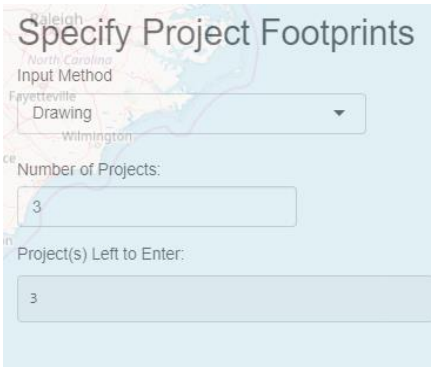


Figure 2. The user interface to input details of projects to be analyzed

In this exercise, the focus is to explore the 'Drawing' dropdown option for 'Input Method' project footprints. Enter 'Number of Projects planning to enter' to be 3. At a later time today, users can play with different numbers.

It is okay if you do not already have projects in mind for this exercise. Pick any 3 areas that stand out to you.

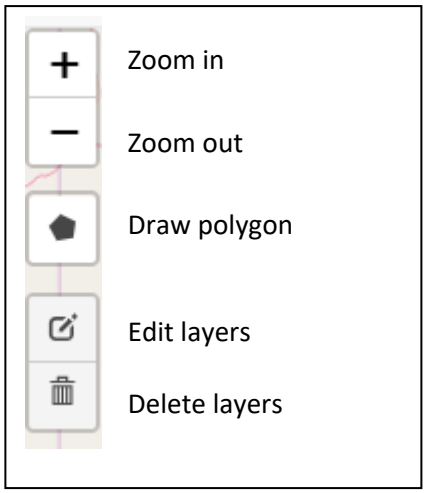
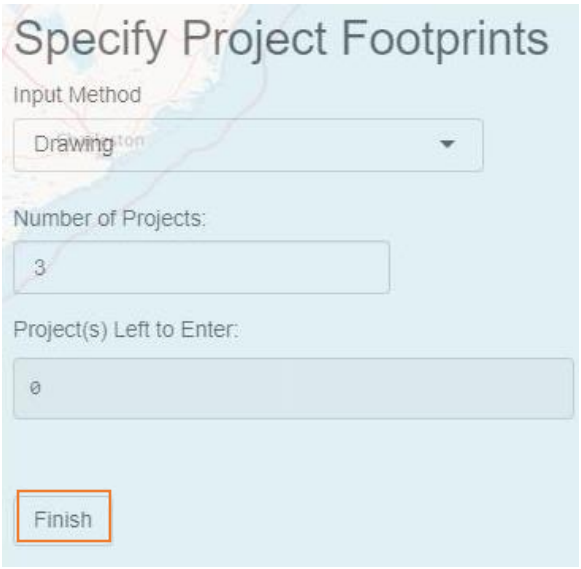


Figure 3. Drawing Options

6) Use the buttons on the left of your screen (Figure 3) to zoom, draw, and delete your project footprints.
    a. Zoom in to your area of interest
    b. **Click "Draw polygon."** Draw your area of interest on the map by **clicking around the boundaries of your area of interest**.
    If you are unhappy with your polygon, click "delete last point" or "Cancel"
    c. When you are done drawing your first polygon, you must tell the app that you want to finalize the footprint. Either **click "Finish"** next to the "Draw polygon" button in the top left or **click on the first point of the polygon you drew.**
    d. **Click "Finalize this footprint"** in top right box.
    ****ONLY CLICK THIS BUTTON ONCE OR YOU WILL BE DISCONNECTED****
    You must wait for the polygon to turn from blue to orange before drawing your next polygon
    e. Repeat for polygons #2 and 3

Repeat Step 5 until the 'Number of project needed' comes down to zero as shown in Figure 4.

Figure 4. Finalizing User Input



f. After entering the project footprints, make sure to **select 'Finish'**.

7) Once you have clicked 'Finish', a 'processing' pop up will appear in the lower right hand corner of the page (Figure 5.a). When the tool is done processing it will push you automatically into the Decision Analysis tab (Figure 5.b).

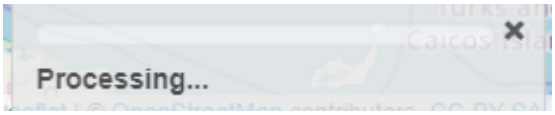
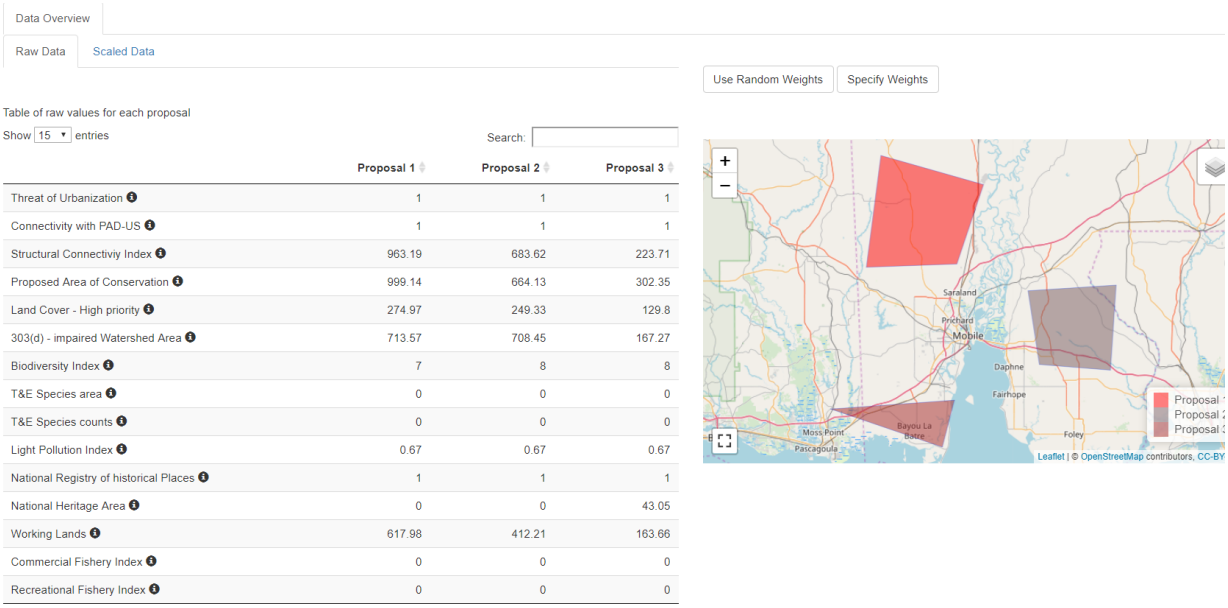


Figure 5.a



	Proposal 1	Proposal 2	Proposal 3
Threat of Urbanization	1	1	1
Connectivity with PAD-US	1	1	1
Structural Connectiviy Index	963.19	683.62	223.71
Proposed Area of Conservation	999.14	664.13	302.35
Land Cover - High priority	274.97	249.33	129.8
303(d) - impaired Watershed Area	713.57	708.45	167.27
Biodiversity Index	7	8	8
T&E Species area	0	0	0
T&E Species counts	0	0	0
Light Pollution Index	0.67	0.67	0.67
National Registry of historical Places	1	1	1
National Heritage Area	0	0	43.05
Working Lands	617.98	412.21	163.66
Commercial Fishery Index	0	0	0
Recreational Fishery Index	0	0	0

Figure 5.b – Decision Analysis Tab

8) The Decision analysis tab is the entry point to 3 new tabs including Data Overview, Raw Data and Scaled Data. In the Data Overview tab, you will see a table of normalized scores for each proposal. You will also see a map with your proposed areas of conservation mapped. You can also view the hex grid associated with each proposal by **turning on the "Proposal details" layer** in the upper right corner of the map

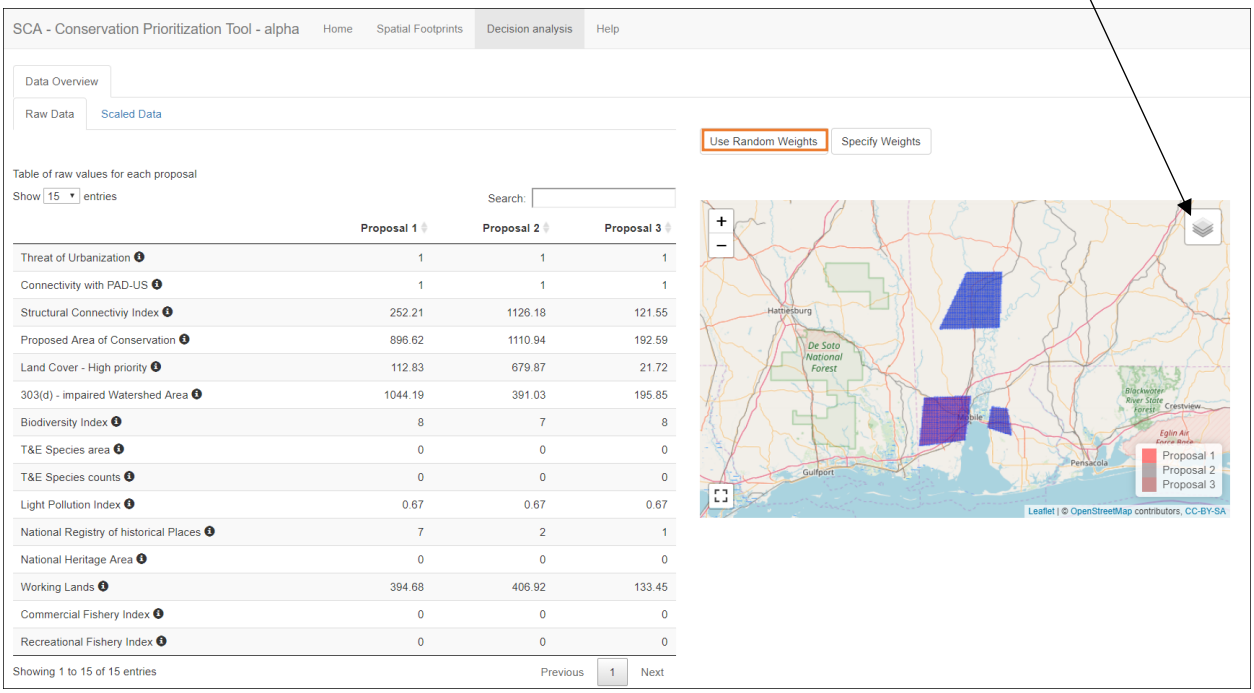


Figure 6. Data Overview – Use Random Weights

NOTE: There is both a "Raw Data Table" and a "Scaled Data Table." The Scaled Data Table is reporting the scores for each data set for each proposal scaled to the highest value.

Once you have clicked on Use Random Weights, please be patient!
****The tool may take a minute to run the simulations.****

You will first see the 'Simulating" pop up box (Figure 7)

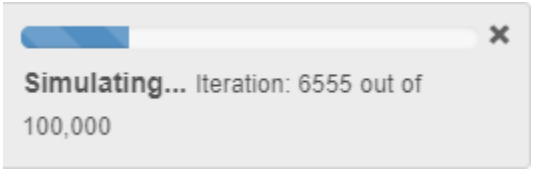


Figure 7 Simulating

The Results Tab will bring you to the Decision Support-MCDA Model tab (example below). The first graphic is the Rank Acceptability graph (Figure 8) which *illustrates the percentage of time each of the proposed area of conservation is ranked highest, and so forth*. In this example, Proposal 2 ranks highest 98% of the time, proposal 1 ranks last 98% of the time, and proposal 3 ranks 2nd 95% of the time. Just below the rank acceptability tab is the **button that allows you to Generate a report.**

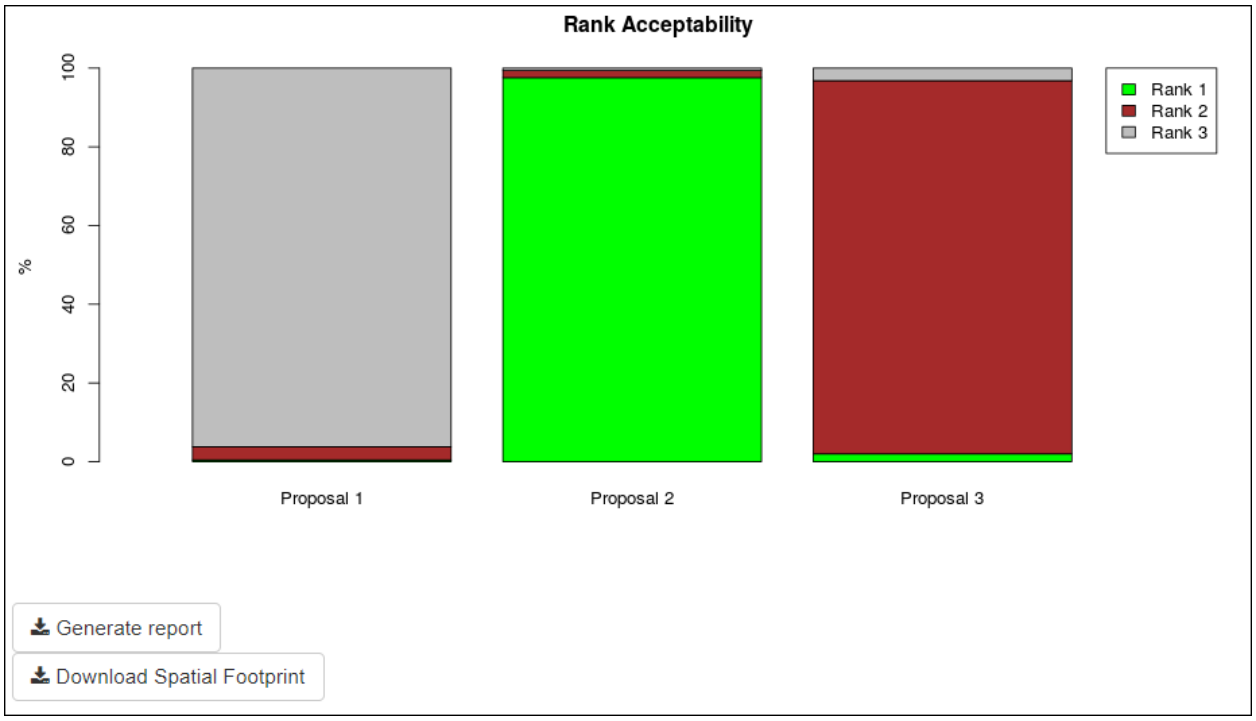


Figure 8. MCDA Simulation Results -Rank Acceptability

A report will include:

a) the proposal footprint (map of proposed areas of conservation).
b) List of measures with scaled scores for each measure included in the assessment.
c) User preferences or weights.
d) Results graphics, including rank acceptability graph and central weights graph.

MCDA simulation also produces the Central Weights graph (Figure 9). This graph includes the 5 RESTORE goals on the x-axis where HA is Habitat; WQ is Water Quality and Quantity; LCMR is Living Coastal and Marine Resources; CR is Community Resilience; and Eco is Gulf Economy and the Central weights on the y-axis. The proposal with the best fit to the goal will have the straightest line. Deviations from the straight line indicate the goal that should be weighted highly for this project to be higher ranking. For instance, Proposal 1 would elicit a higher score if weights were set to high for LCMR and Comm. Res.

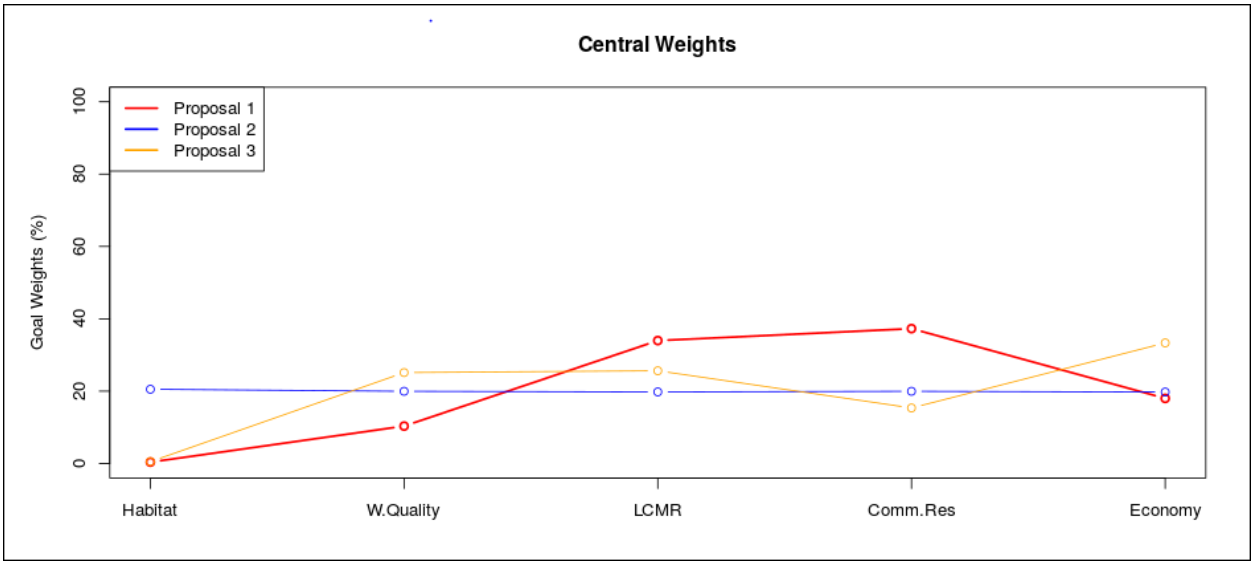
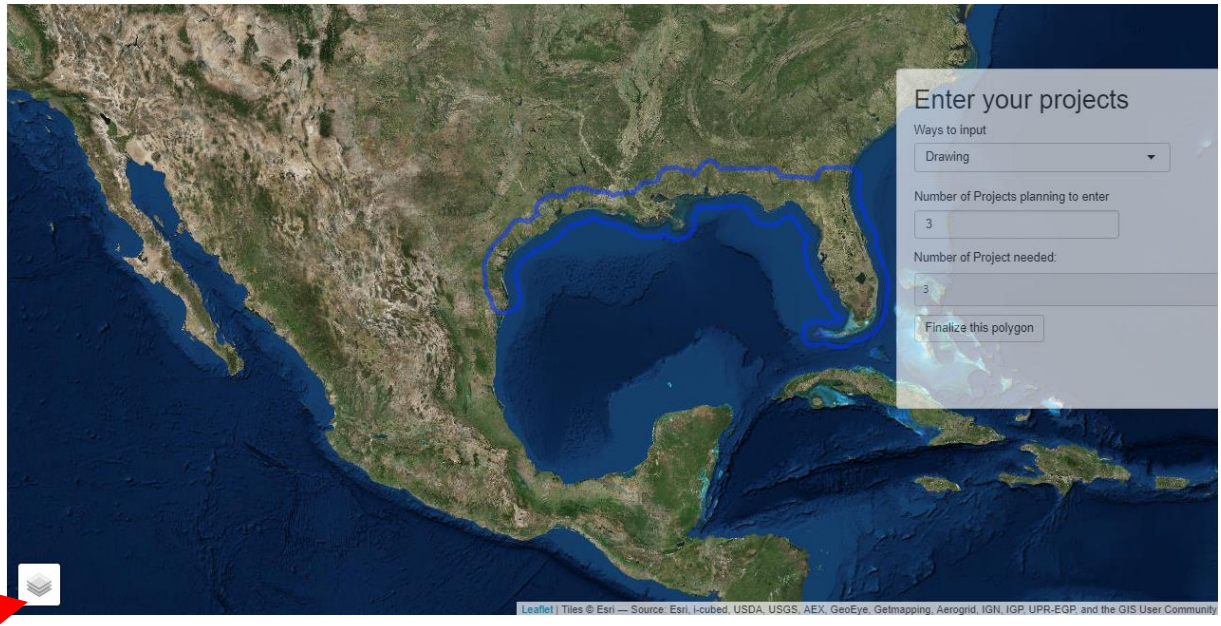


Figure 9. MCDA Simulation Results - Central Weights

We encourage you to try the exercise again, this time using satellite view!



You can toggle different source imagery using the tab at the bottom left of the screen

User Notes/Comments: