Colorado Decision
Support Tool

Step-by-Step Example to using the Colorado Decision Support Tool: Comprehensive Map

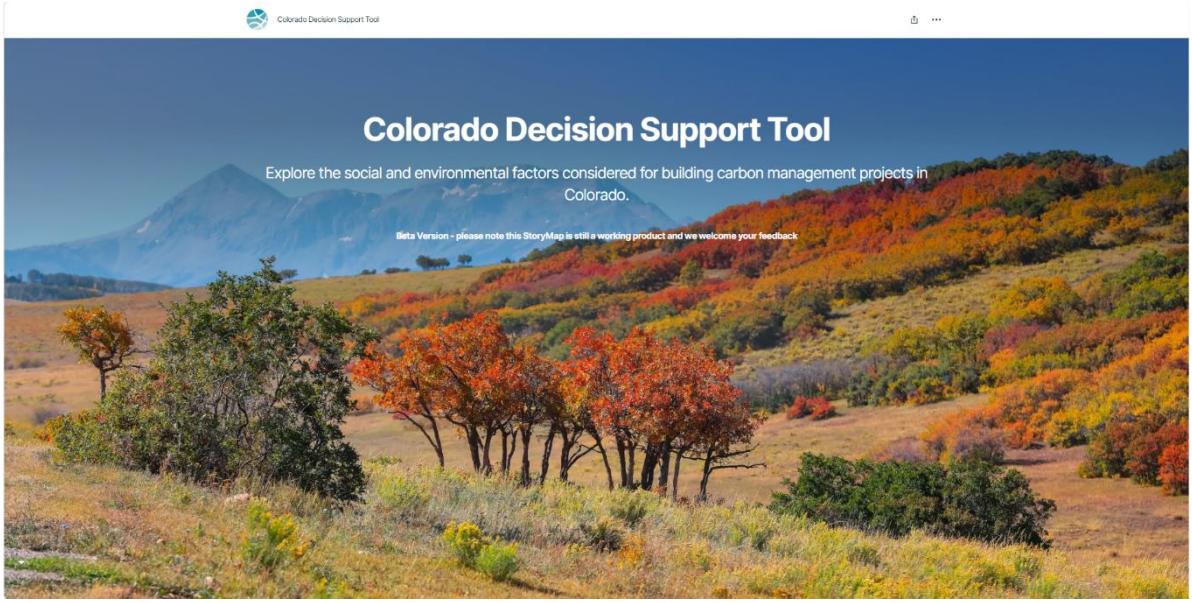
What is the purpose of this document?

This document is here to help you use the Decision Support Tool effectively. This tool is most useful when you have a question and need data to back up your discussion or comments. This Step-by-Step guide is intended to help you use the Comprehensive map to compare different potential project siting locations to determine which scores the lowest for environmental and social factors, indicating fewer constraints to project development and success.

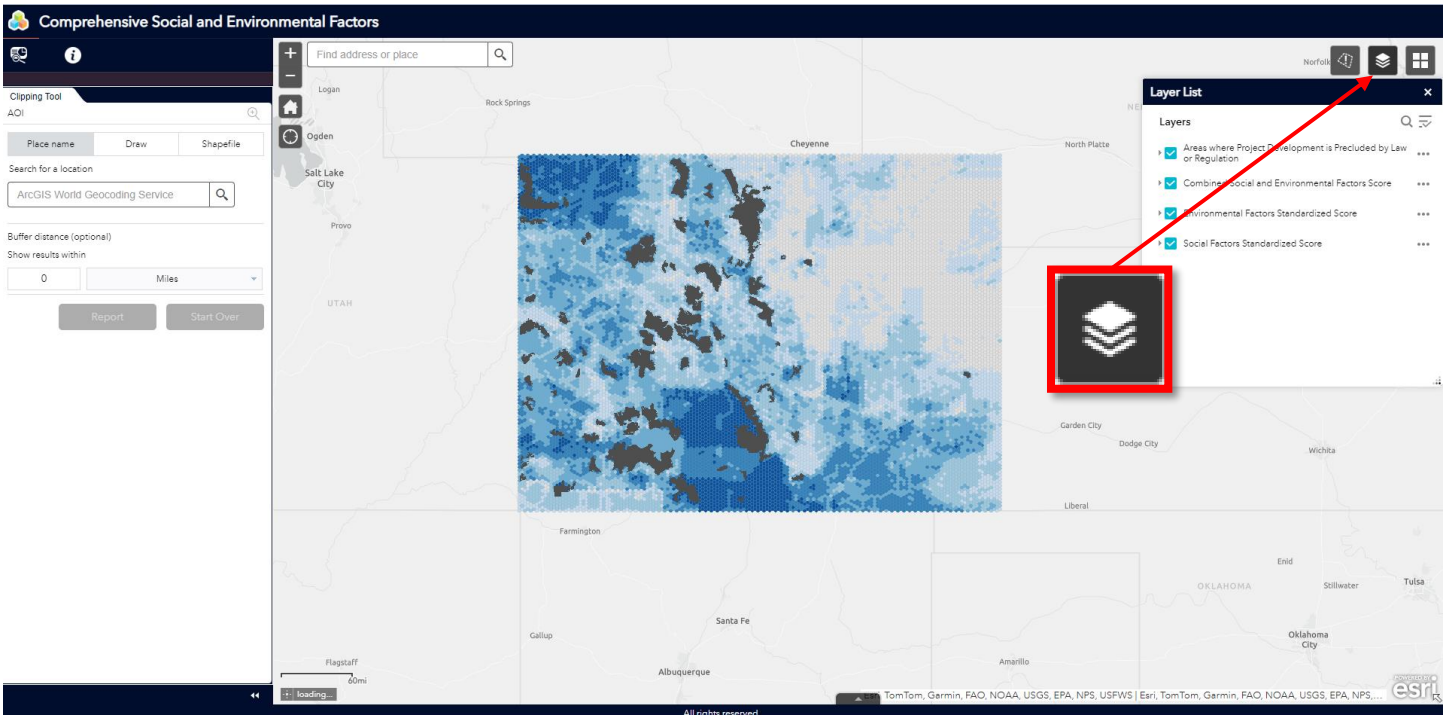
This document will walk you through tools available in the Comprehensive Map:

1. Find your area of interest and compare the influence of social and environmental factors using the map layers
2. Use the Clipping Tool to summarize scores for social and environmental factors in an area defined by the user, either by drawing the boundaries or uploading a shapefile. This tool summarizes the number of acres inside the area that fall into score ranges.
3. Use the Siting tool to calculate the average factor score in an area defined by the user by drawing the boundaries or buffering a point. This tool provides the average factor score for social factors (ranging 0 to 100), environmental factors (ranging 0 to 100), or the combined factor score (ranging 0 to 200). A lower score indicates an area with fewer modeled constraints to siting a project for development.

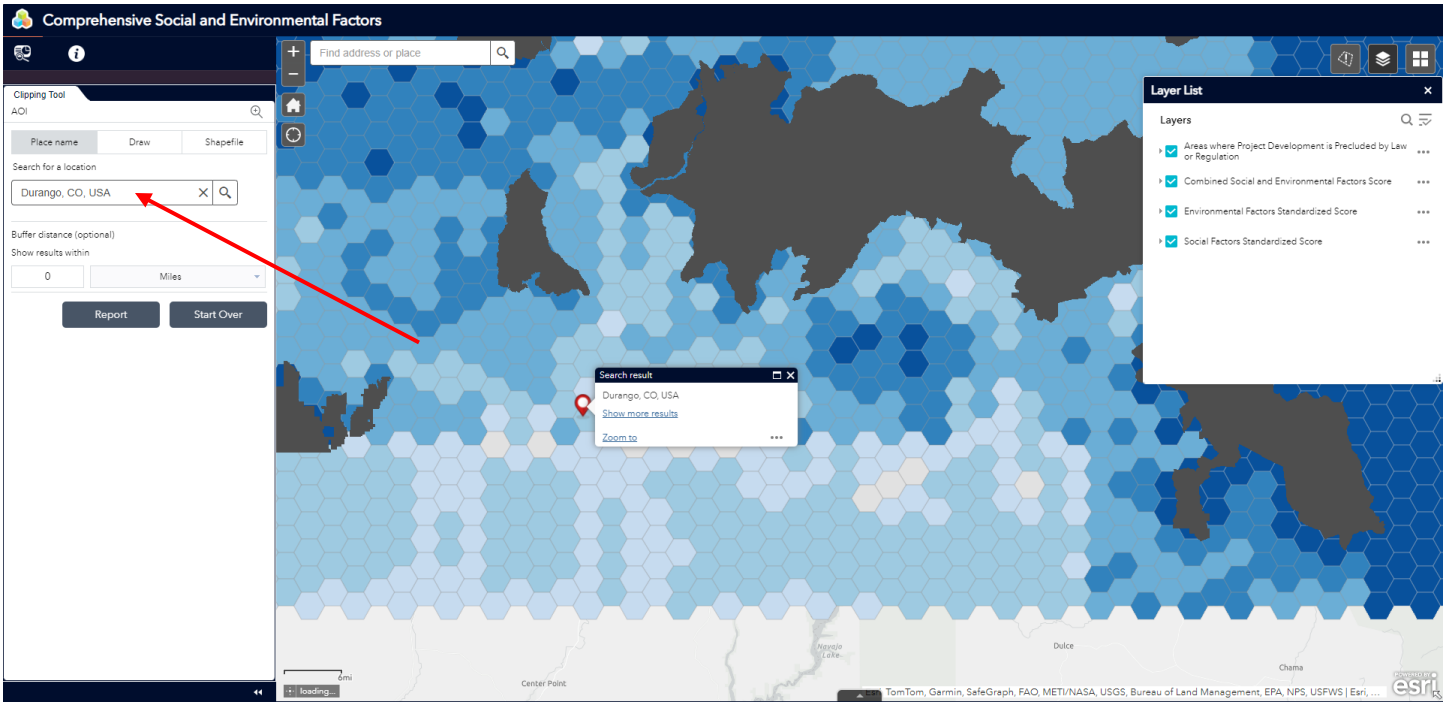
Step 1: Open the Colorado Decision Support Tool Comprehensive Map. You can navigate to the map from the Colorado Decision Support Tool StoryMap.



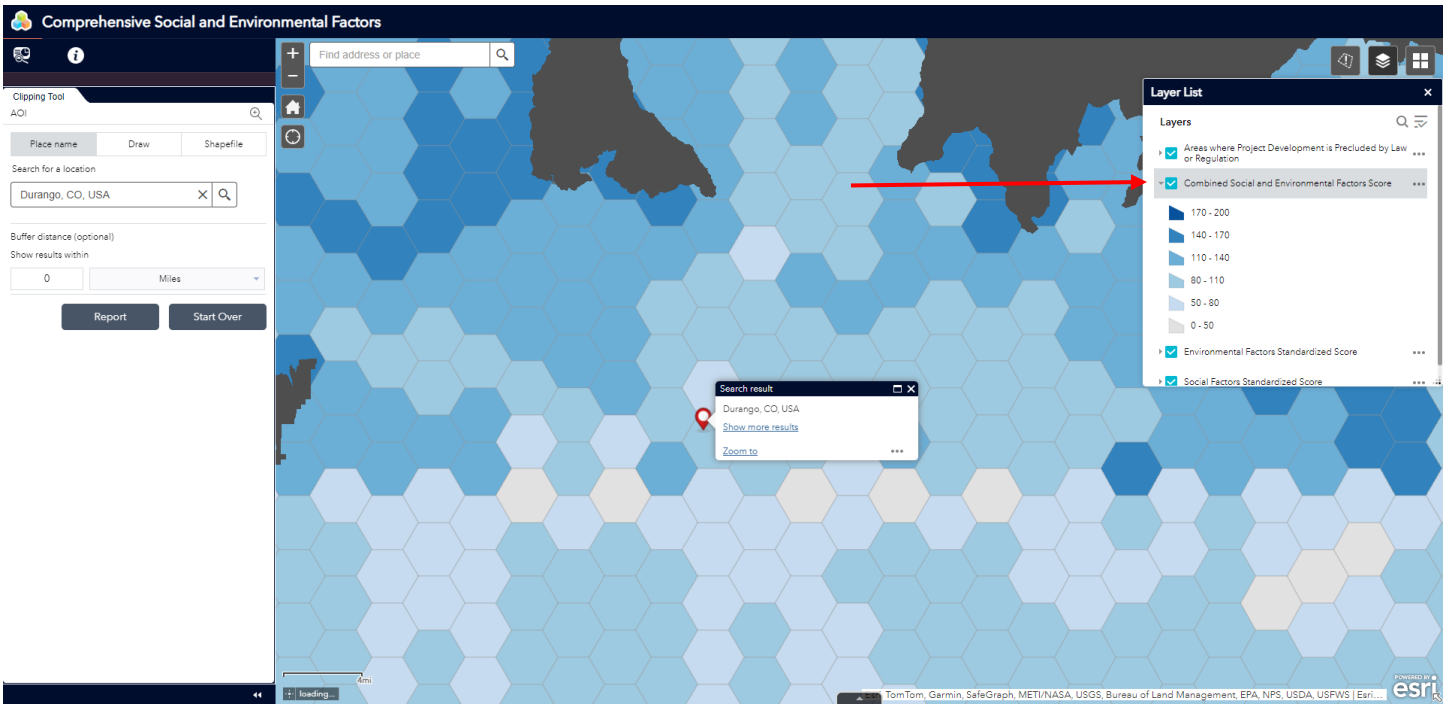
Step 2: Make sure the Layers List is turned to toggle on different factor score layers. Leave the "Areas where Project Development is Precluded" turned on (☑). The Combined Social Factors and Environmental Factors Score is the sum of the standardized Social and Environmental Factors Scores. By default, it will be displayed when the map is first opened.



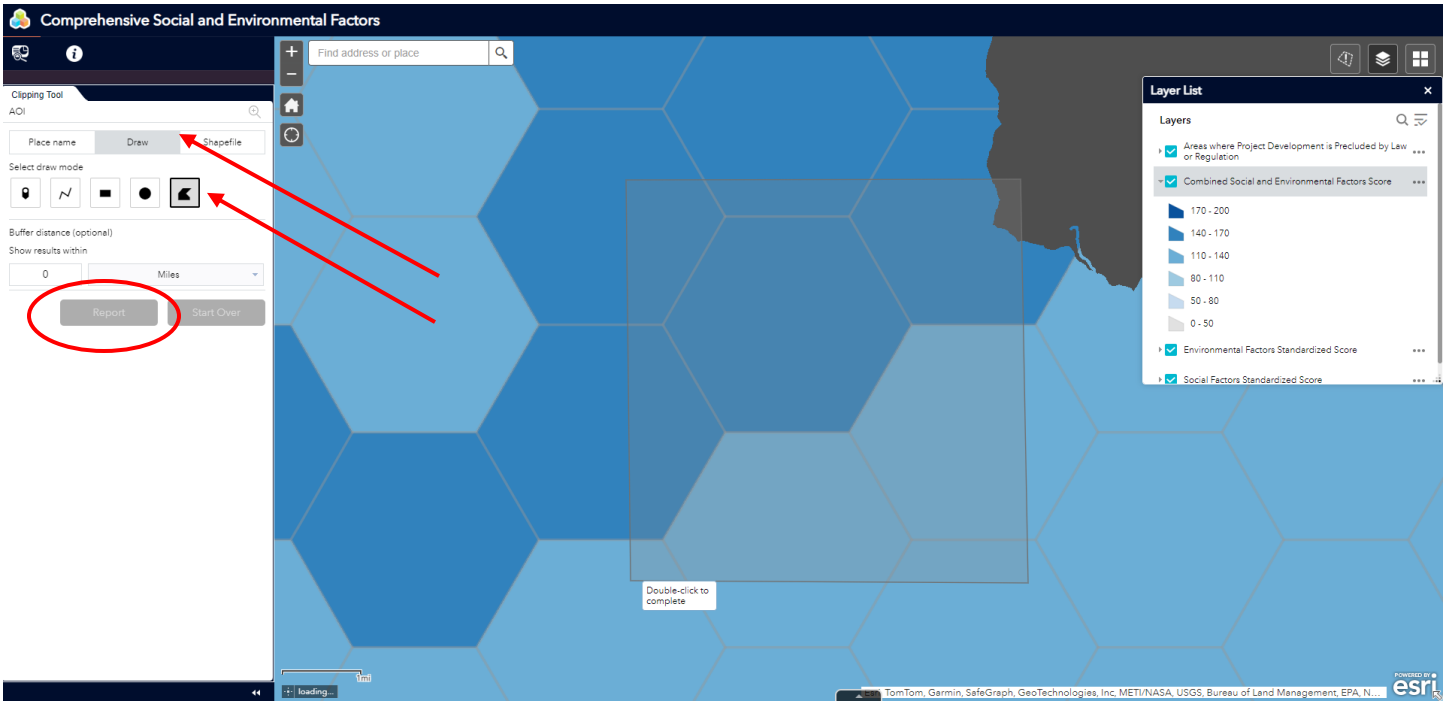
Step 3: Use the search bar in the left panel to search for a location. For this example, we entered "Durango, CO". It will drop a pin on the map. Zoom into the pin.



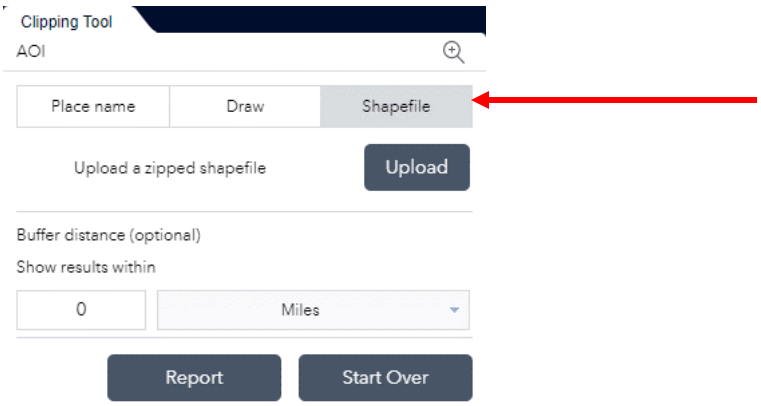
Step 4: Each hexagonal cell in the grid represents 10 square miles. The scores in the cells range from 0-200 in the Combined Factors Score, or 0-100 for the individual Environmental Factors or Social Factors layers. Click on the grey triangle beside the layer to display the legend. If multiple layers are turned on (☑), whichever appears higher in the list will be displayed. Toggle on and off the layers to visually evaluate which areas have social factors, environmental factors, or both to consider in project development. Click on any cell to see the scores for that cell.



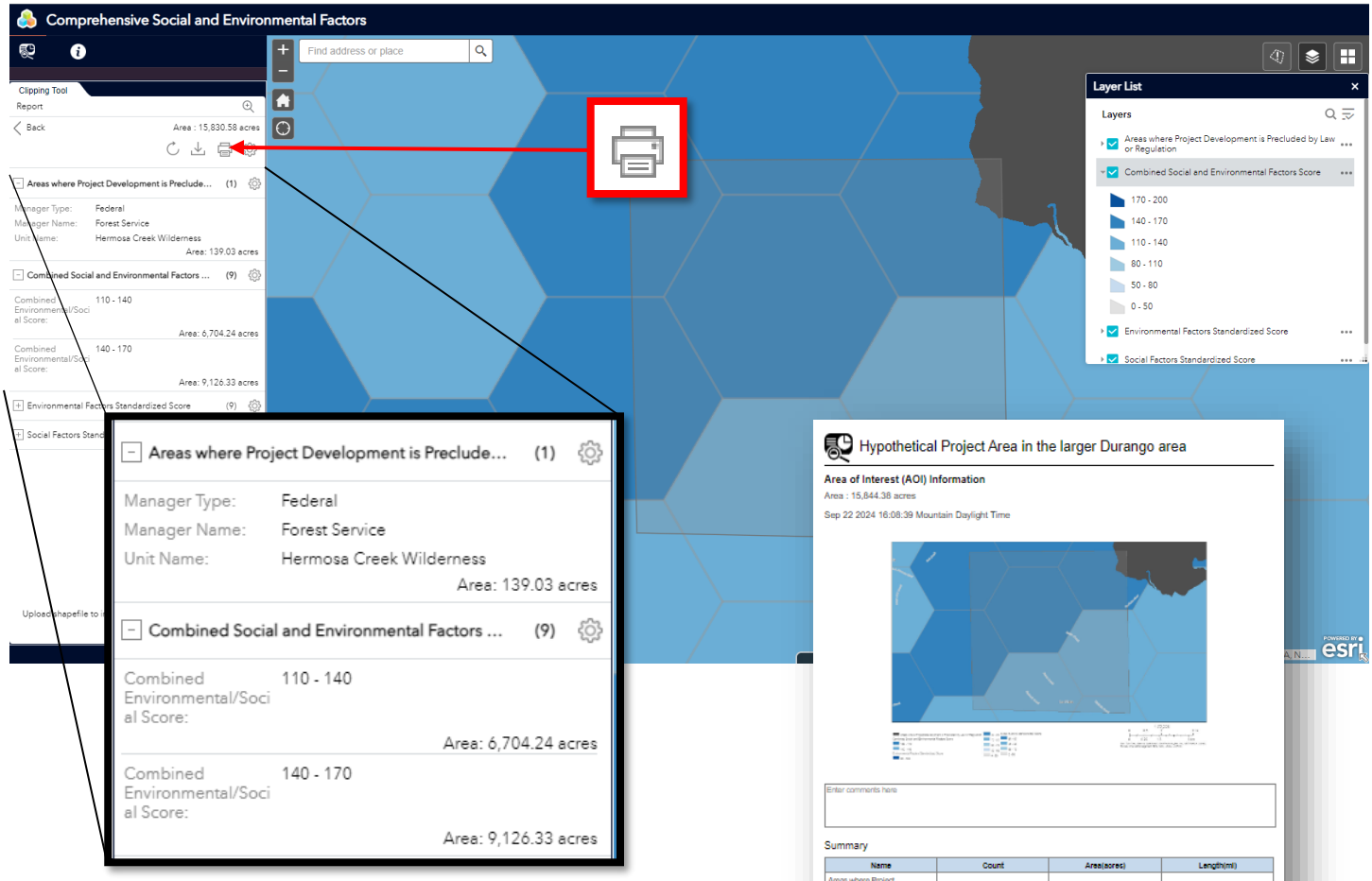
Step 5: Use the Clipping Tool in the panel on the left to summarize the social and environmental factor scores in an area you define. Upload a shapefile or draw it yourself. For this example, we will draw a polygon by clicking where the corners should go and double clicking to finish. See the polygon we drew as a translucent gray shape on the map. Then press the report button.

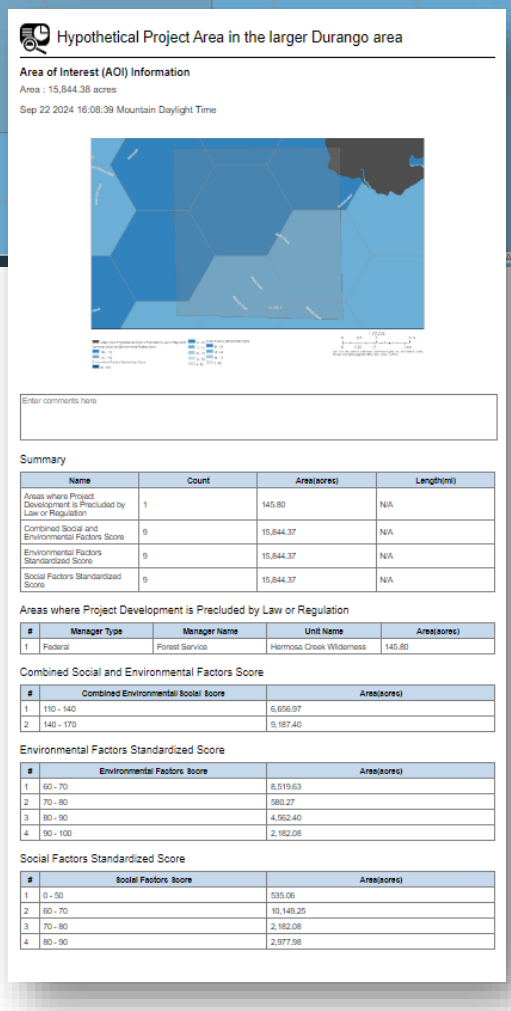


Note: Instead of drawing a polygon (or line), we could have uploaded shapefiles with the footprints of proposed project alternatives for a more precise analysis.

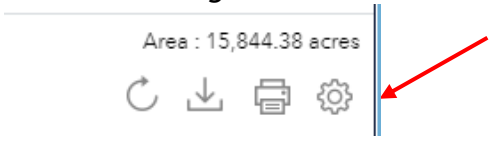


Step 6: The report button pulls up a summary of the factor scores in the selected area. This polygon has 139 acres in an area that is precluded from development (Hermosa Creek Wilderness) and has relatively high scores for combined social and environmental factors. Click the printer button to produce a printable report with the summary statistics for the scores in each layer. This report comes up in a new tab and allows you to edit the title before saving or printing.

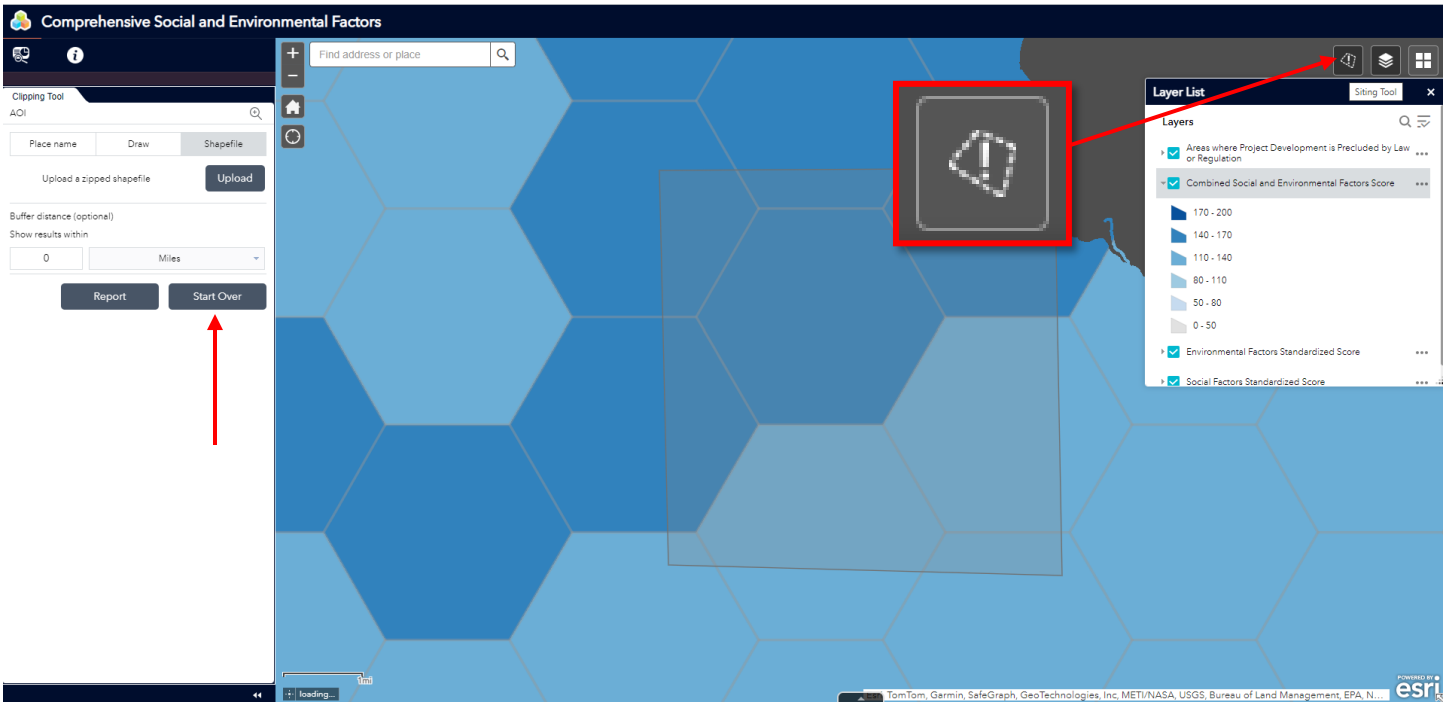




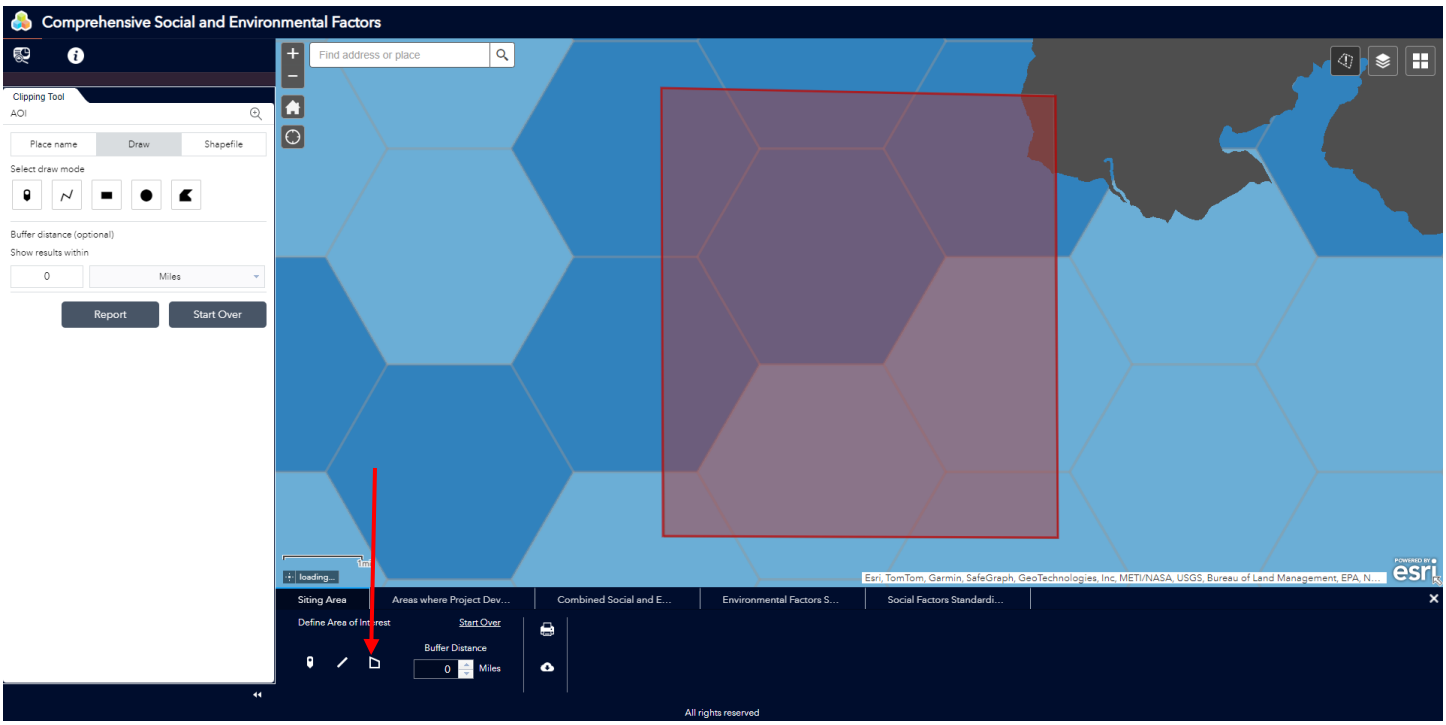
Note: The report summarizes the area within the score ranges defined in the legend. By default, the area is reported in acres. You may select a different unit of measure in settings.



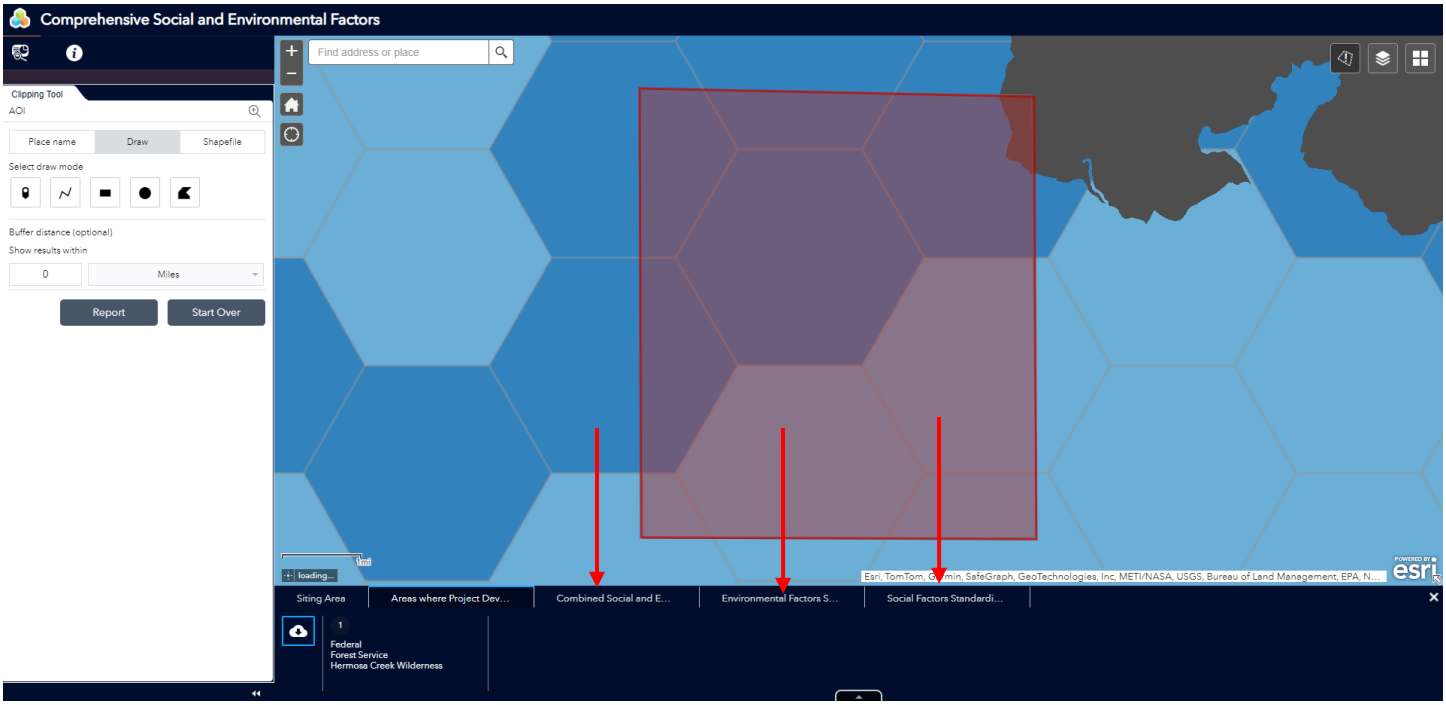
Step 7: Return to the tab with the Comprehensive Social and Environmental Factors Map. You could click the Start Over button to repeat this process in another location. However, for this demonstration, we are going to take a look at the Siting Tool in the upper right-hand corner next.



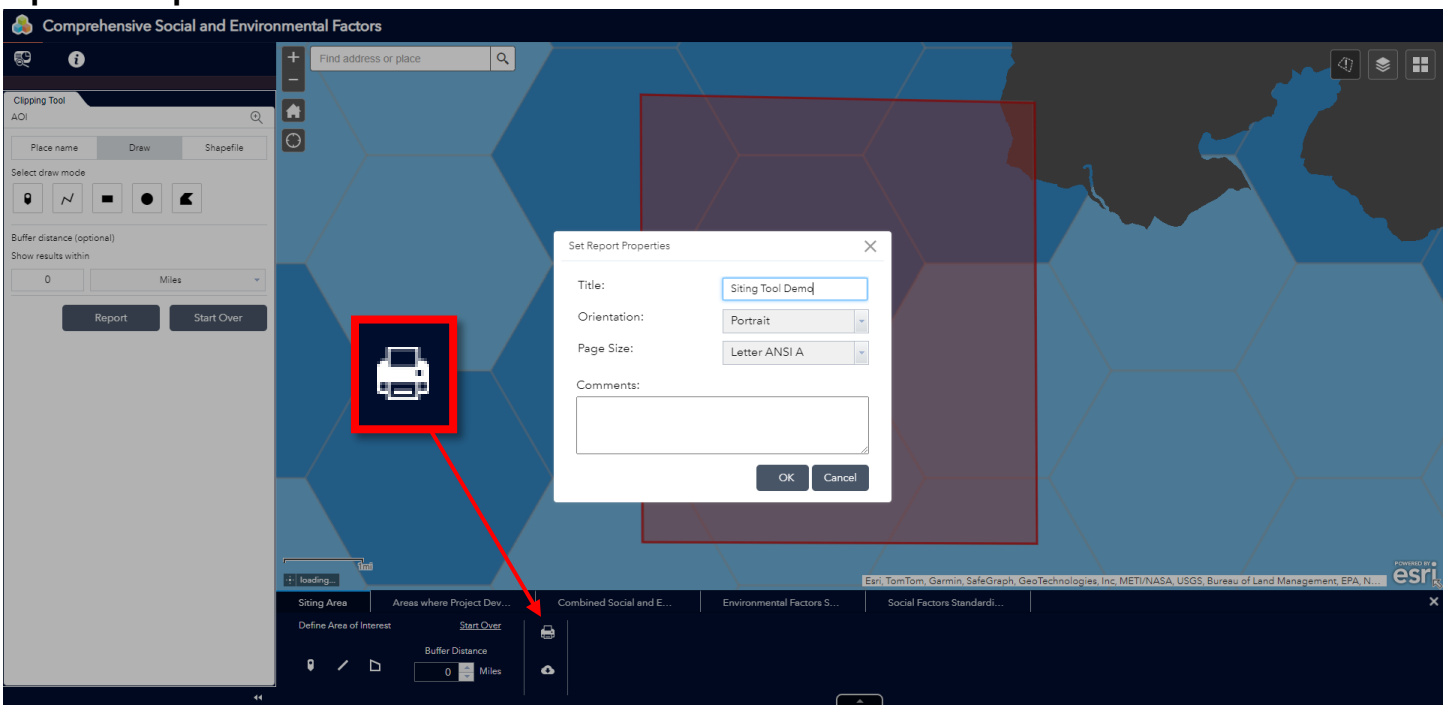
Step 8: The Siting Tool opens a dark blue bar at the bottom of the screen. You will need to redefine your area of interest by drawing it or buffering a point you select on the map. As our previous boundary is still visible, we will use the polygon tool to trace the boundaries.



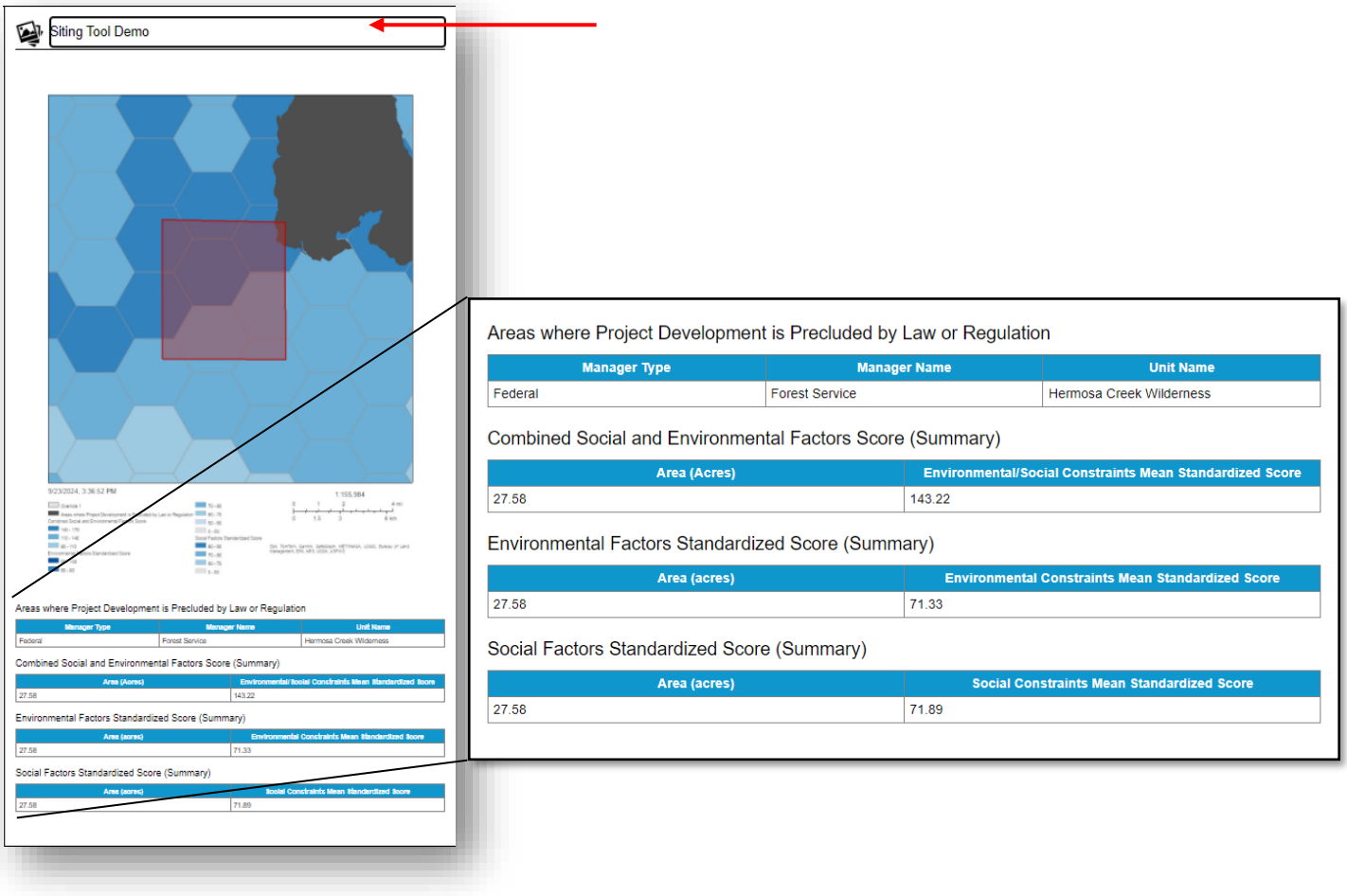
Step 9: View the average score in the defined area for each factor category by clicking through the tabs in the Siting Tool. These averages are useful when it makes sense to present a single score for an entire area, allowing the user to quickly compare multiple areas. For interpretation, keep in mind that the Environmental and Social factors standardized scores range 0-100, and the Combined Factors score ranges 0-200.



Step 10. In the Siting Area tab of the Siting Tool, you can opt to print a report of the results. The report will open in a new browser tab.



Step 10. View the report in the new browser tab. The report title may be edited before being saved.



Step 11. While this map is useful to generally compare the relative number of social and environmental factors and their spatial distribution on the landscape, we recommend returning to the Social Map and the Environmental Map to explore and describe the specific features and factors at issue.

Navigation tip: Click the map layers icon in the upper right-hand corner of the map to return to the main Comprehensive Map and Clipping Tool after using the Siting Tool.