

Applying a Legend to Land Cover Data in ArcGIS

Coastal Change Analysis Program (C-CAP)

NOAA Coastal Services Center
(843) 740-1200
www.csc.noaa.gov

Introduction

The Coastal Change Analysis Program (C-CAP) maps land cover and change for the coastal zone of the United States and territories. Where they occur, 25 categories of land cover and 625 categories of land cover change are mapped. These data are delivered as a thematic map in raster format. The thematic map legend contains standardized colors and class names. When working with these data in ArcGIS, the application of some functions may cause the symbology to be rendered differently than the original legend. This can be addressed by importing the standard C-CAP Legend Symbology.

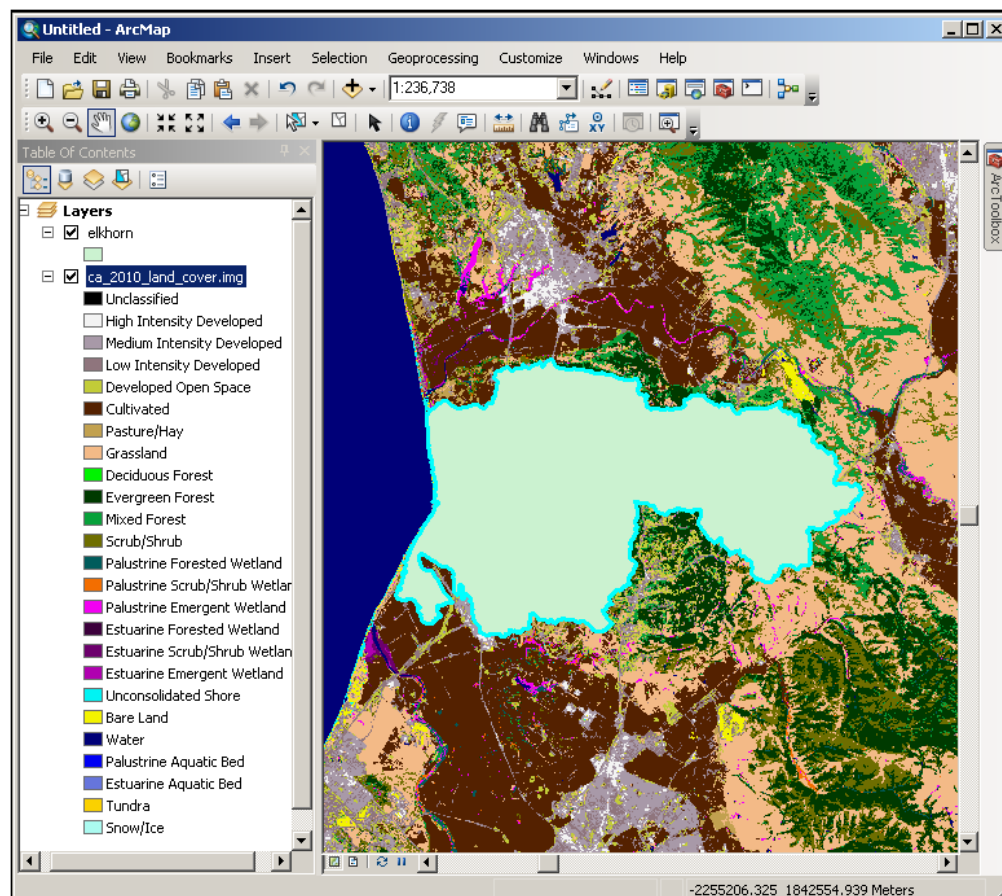


Figure 1: Standard C-CAP Legend in the Table of Contents.

Download C-CAP Legend Symbology

1. Open www.csc.noaa.gov/digitalcoast/_/zip/C-CAP_Legend.zip.
2. Save the Zip file and unzip it to your working directory.

A new directory called C-CAP_Legend will be added to your working directory containing layer files and colormaps with symbology for C-CAP land cover and change:

- C-CAP_Legend.lyr
- C-CAP_Change_Legend.lyr
- C-CAP_Colormap.clr
- C-CAP_Change_Colormap.clr

Apply Legend Symbology

The example below shows C-CAP land cover that has been clipped to the extent of a watershed. ArcGIS rendered a legend that contains the colors from the original colormap, but does not maintain the class names for those categories that are not present in the clipped area.

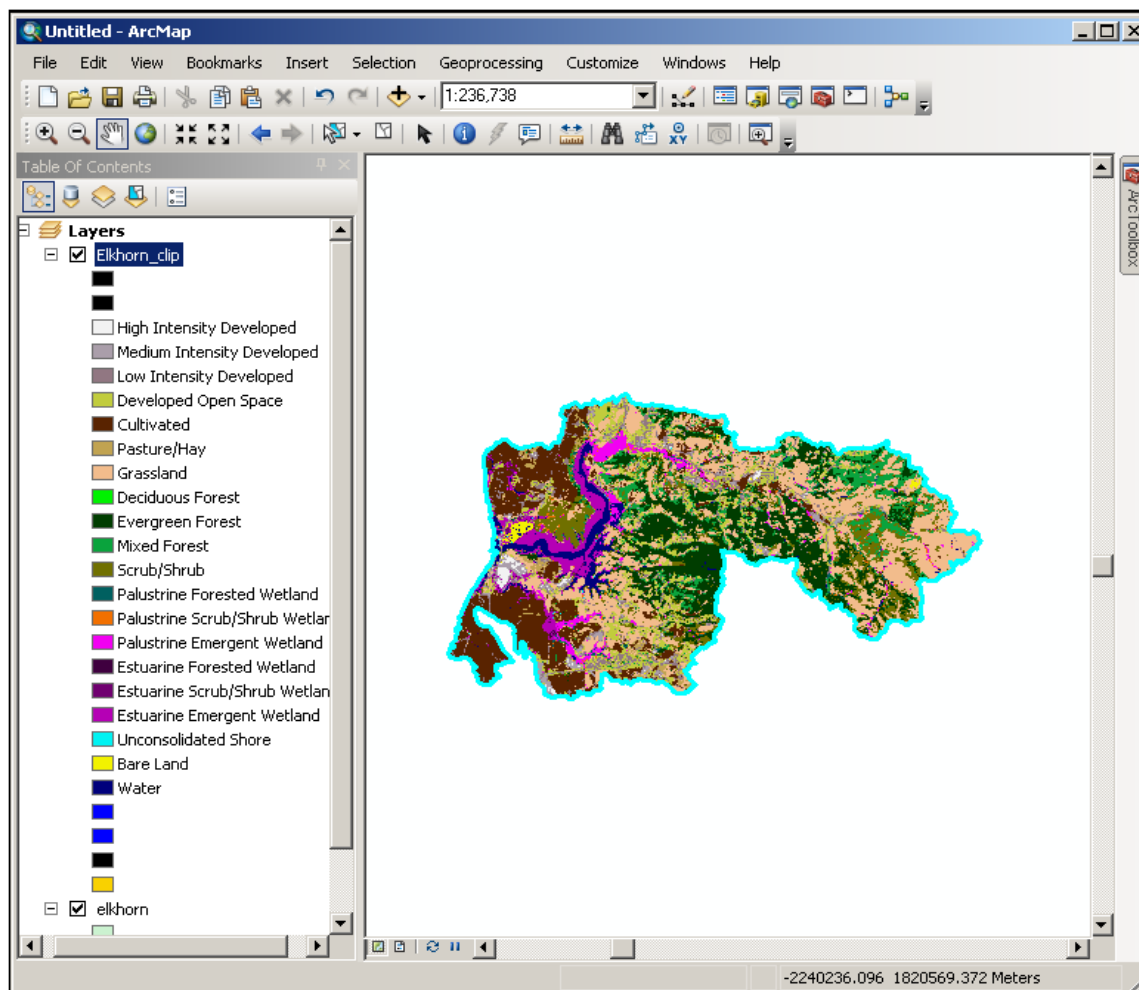


Figure 2: Modified Land Cover with Truncated Legend.

Import Legend Symbolology:

1. Double-click a modified land cover layer to open Layer Properties.
 - a. Select the Symbolology tab.
 - b. Click the **Import Symbolology** button.
 - i. Navigate to \\C-CAP_Legend and select **C-CAP_Legend.lyr**.
 - ii. **Add**
 - iii. **OK**
 - iv. **Apply**

The Standardized C-CAP legend will be applied to the clipped file.

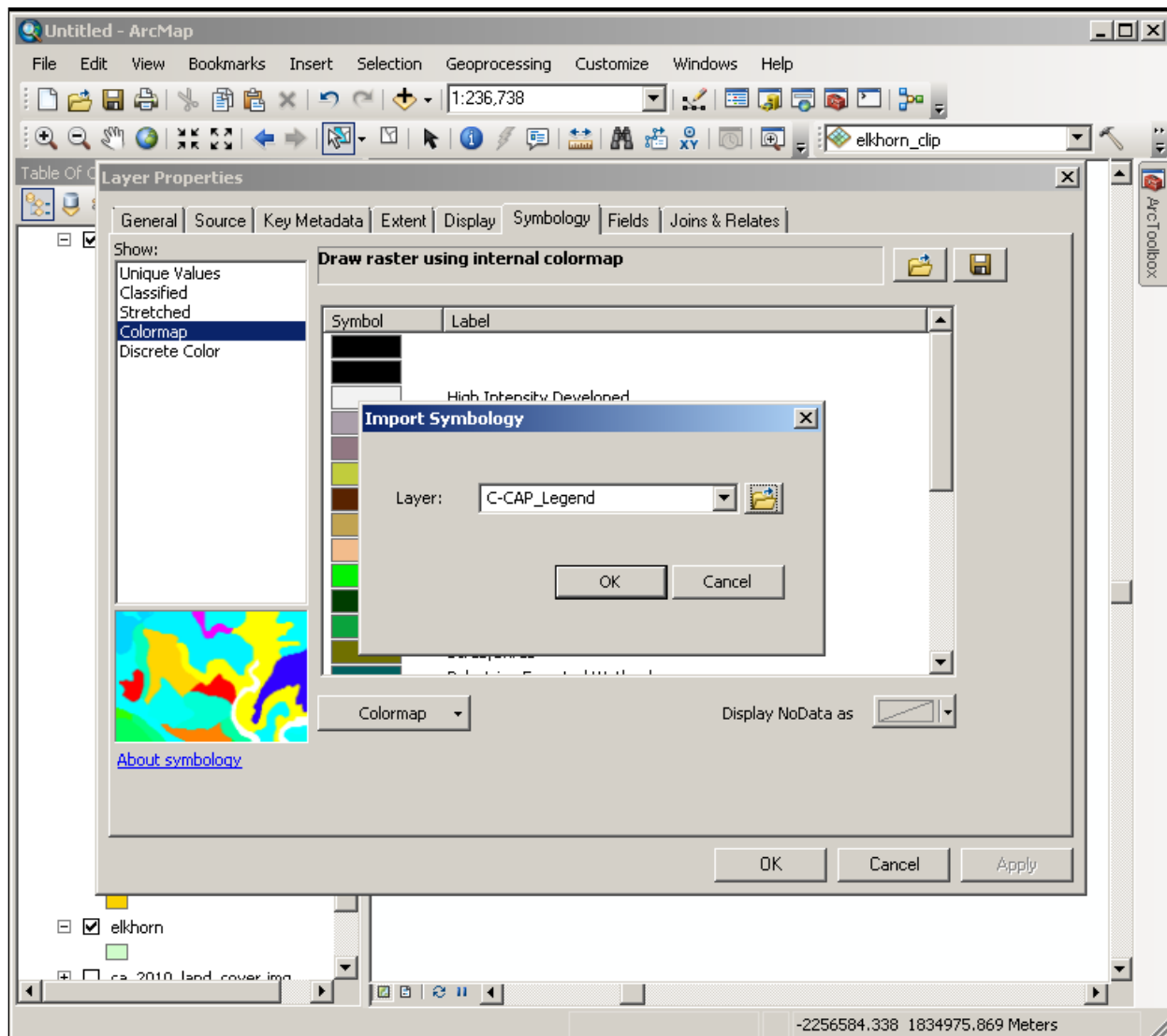


Figure 3: Importing Layer Symbolology.

Add a Colormap and Apply Legend Symbology

Some ArcGIS raster functions will produce an output layer that does not contain a colormap (example below). This can be addressed by adding a Colormap and importing legend symbology.

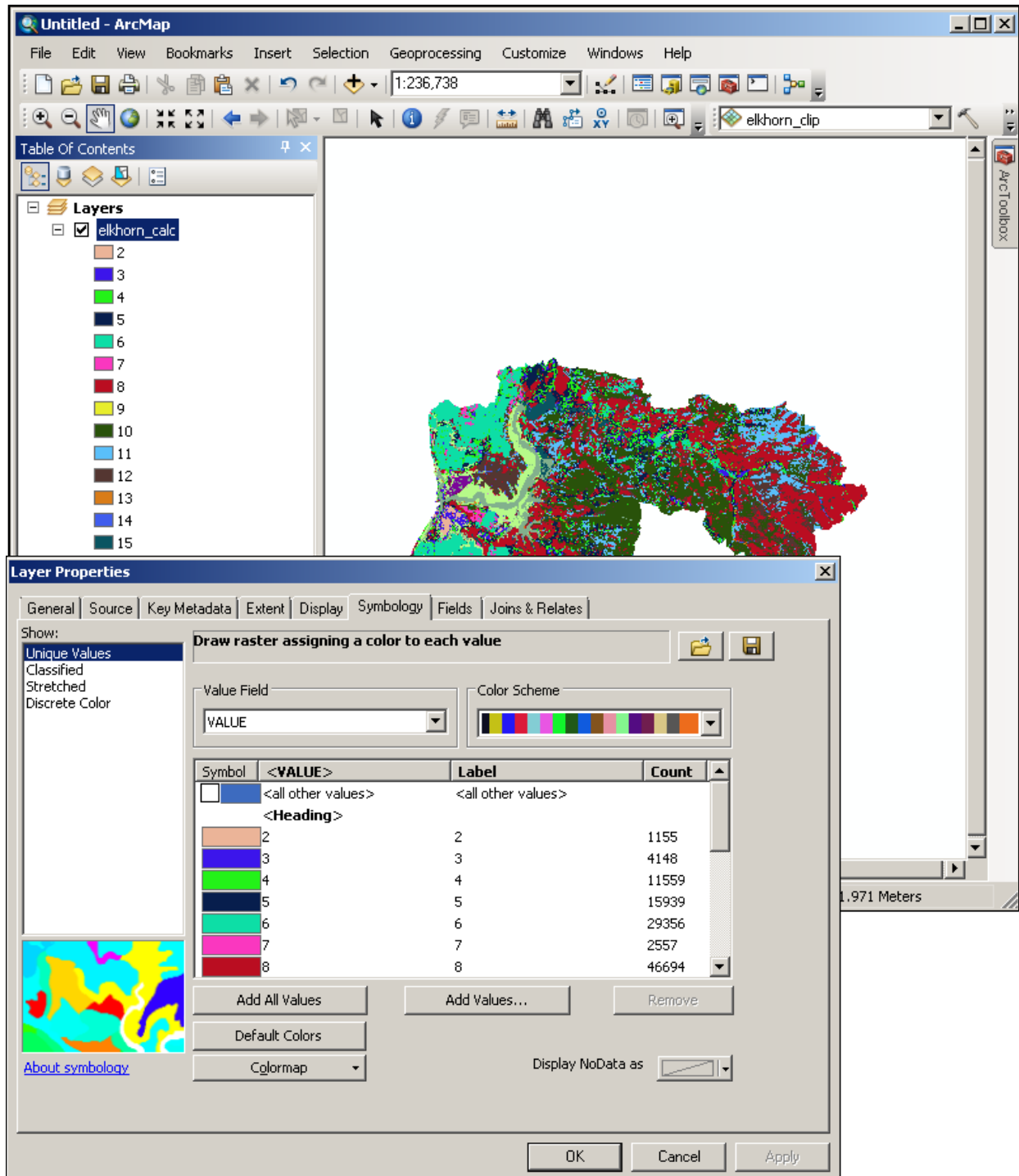


Figure 4: No Colormap Present in a Modified Land Cover Layer.

Add Colormap:

1. Go to **ArcToolbox > Data Management Tools > Raster > Add Colormap**
 - a. Input Raster: **modified land cover**
 - b. Input .clr or .act file: **\\C-CAP_Legend\C-CAP_Colormap.clr**

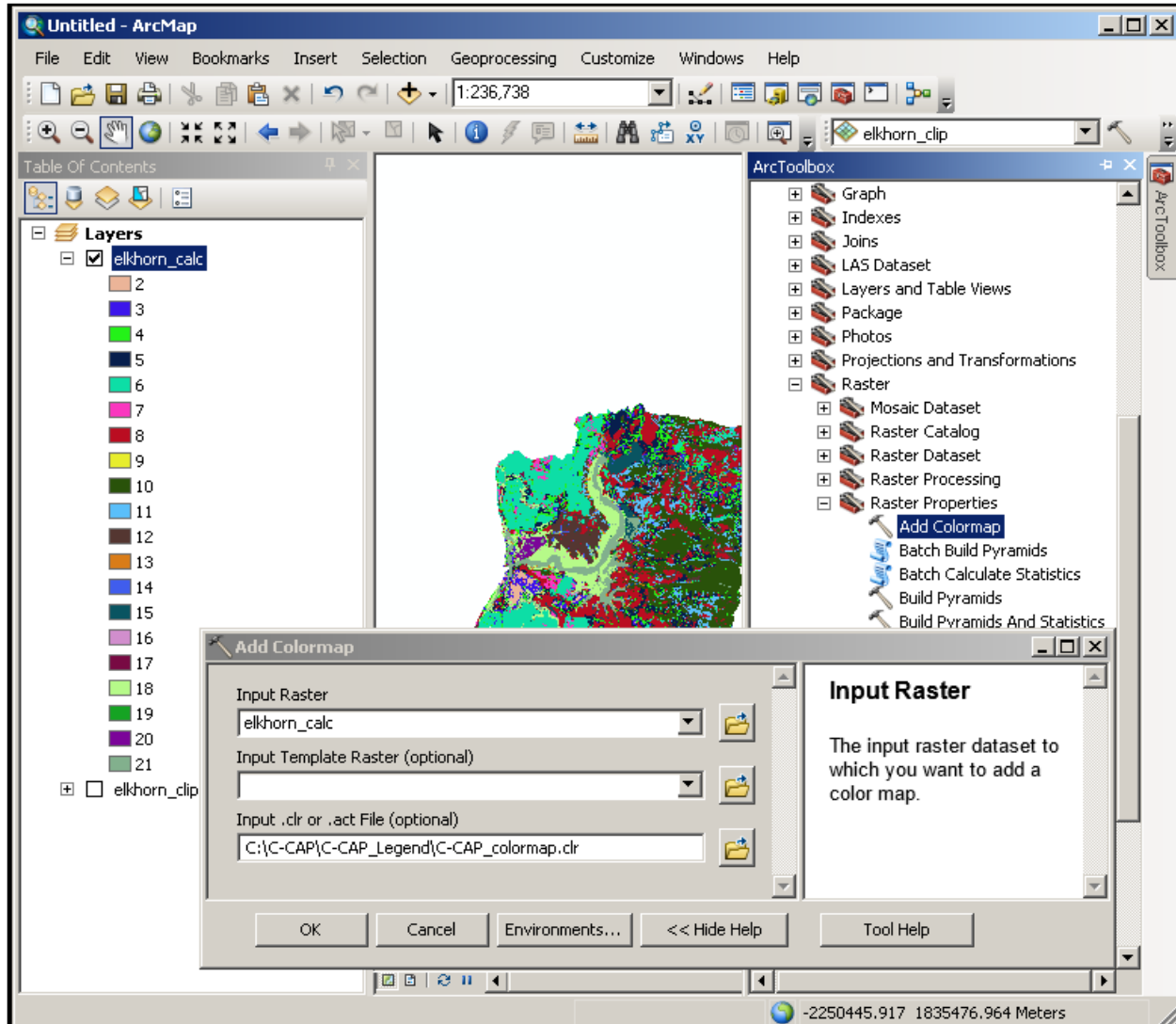


Figure 5: Adding the Colormap.

Import Legend Symbolology:

1. Double-click a modified land cover layer to open Layer Properties.
 - a. Select the **Symbology** tab.
 - b. Click the **Import Symbolology** button.
 - i. Navigate to **\\C-CAP_Legend** and select **C-CAP_Legend.lyr**.
 - ii. **Add**
 - iii. **OK**
 - iv. **Apply**