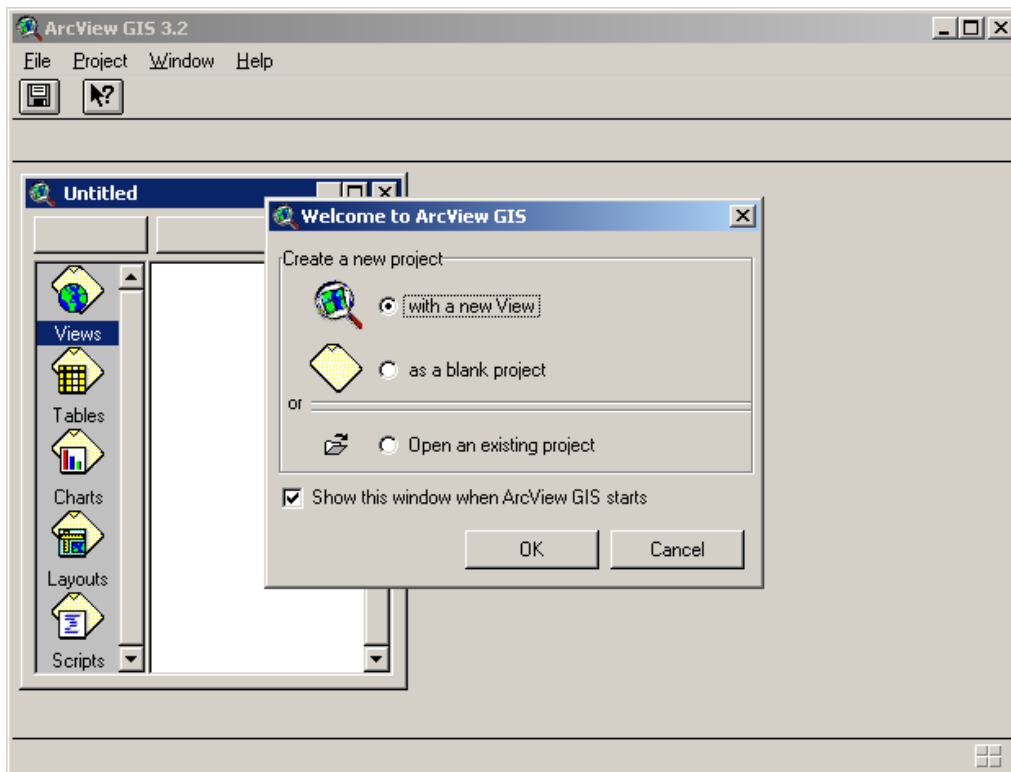


APPENDIX D. MAPPING SEDMODL2 RESULTS USING ARCVIEW 3.2

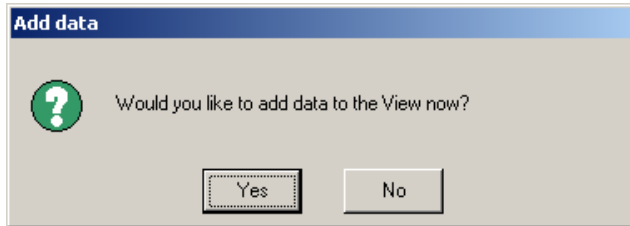
As mentioned in Section 6.0, if the user wants to generate a large scale map with the Seg_ID numbers annotated on the map one approach is to use ArcView. Since ArcView 8.1 is just now being distributed and since many agencies or companies may delay migrating to this new product the following description describes the use of ArcView 3.2.

1. Launch ArcView in the normal manner
2. Once ArcView loads you will be presented with the following screen:

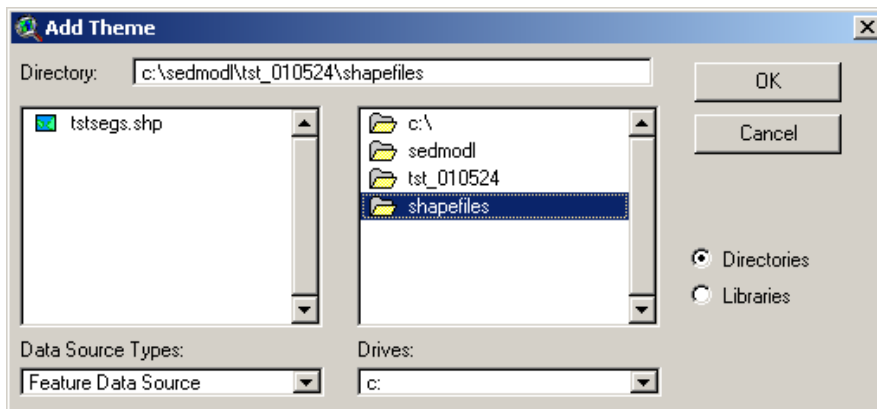
The default choice is to create a new project with a new view, unless you have previously disabled this initial screen from appearing at the start of ArcView. Accept this choice or cancel and select "New" from the project window with the "View" component highlighted.



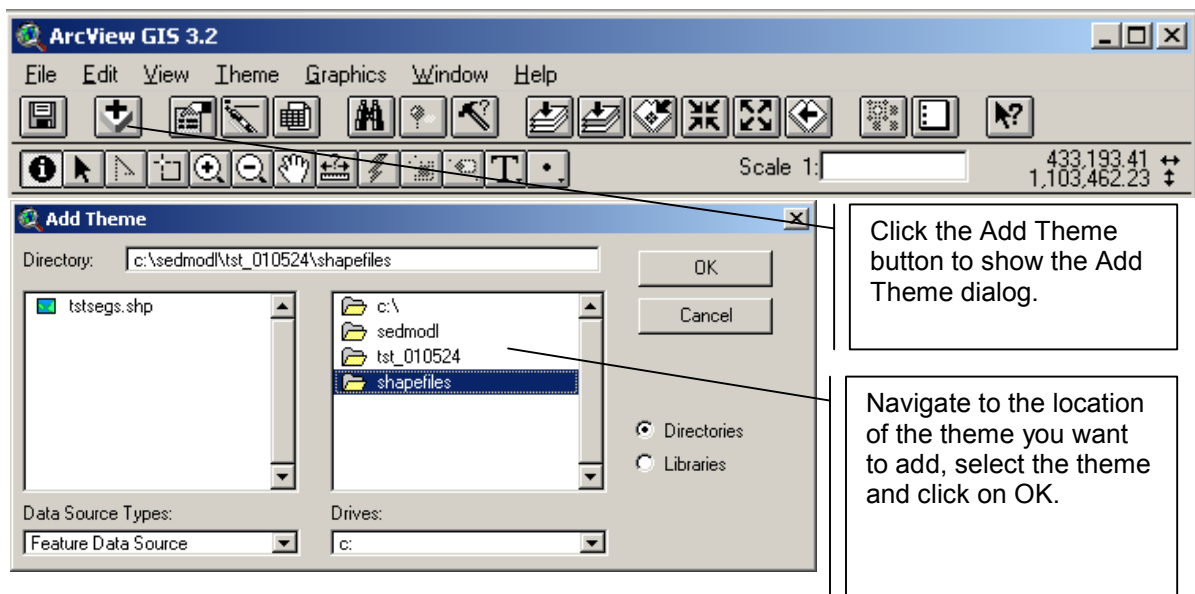
If you accept the “Create a new project with a view”, ArcView will open a view and ask if you want to:



If you accept this choice you can navigate to the location of the shapefile created by SEDMODL2. This should be in a directory named “shapefiles” located under the directory created by SEDMODL2. Highlight the shapefile in the left listbox by single clicking on the file and clicking on OK or by double clicking on the file.



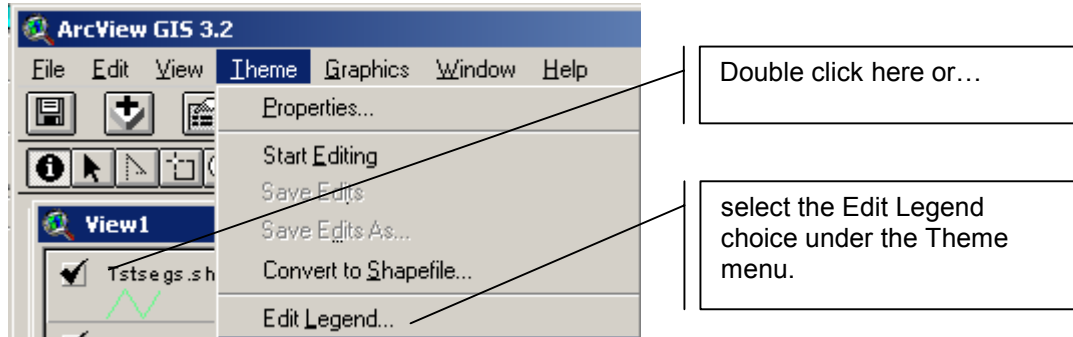
You may want to add other GIS data to the View such as streams and public land survey system (PLSS) or ownership themes.



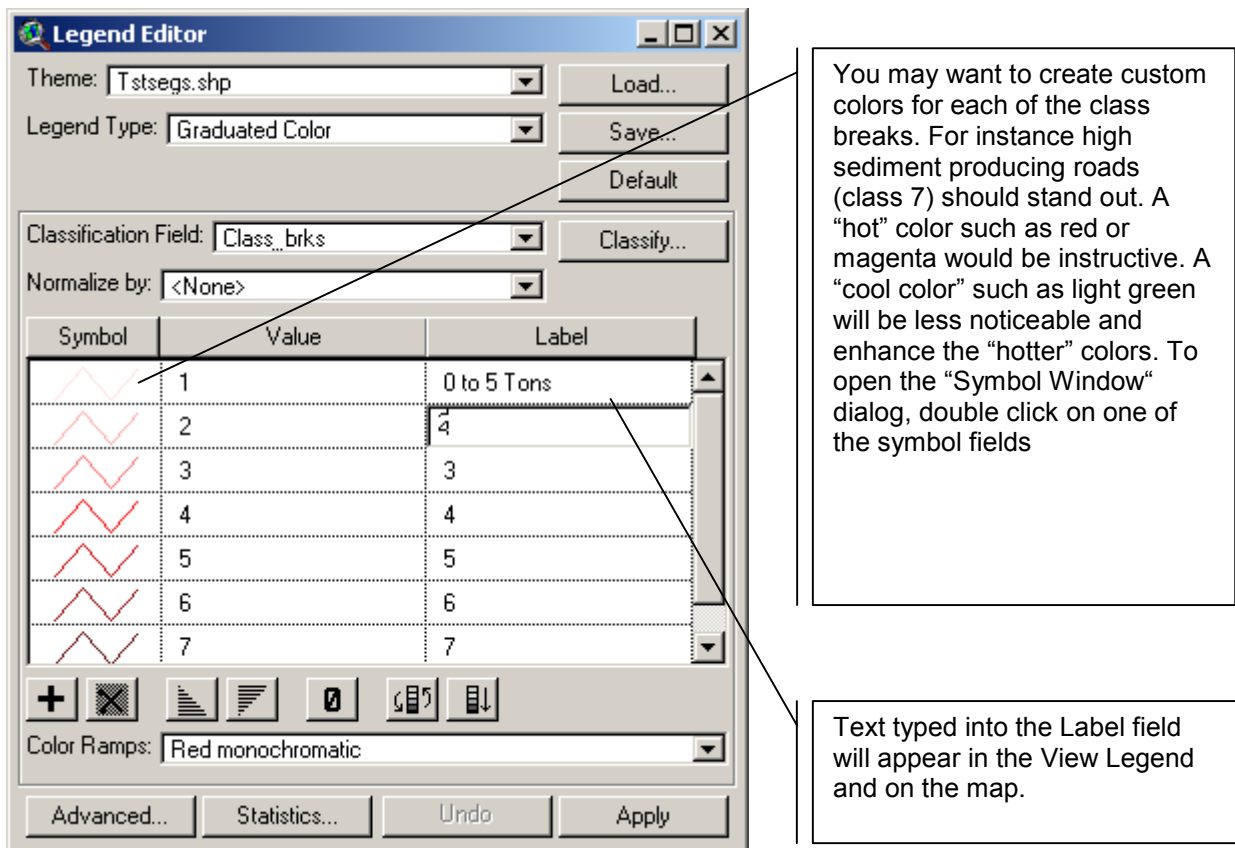
Repeat this process for each theme you want to add. If all the themes exist in one place you can hold down the shift key while you highlight each theme you want to add.

Once you add the themes you want to appear on your map you will likely want to symbolize the features in a certain way. For instance you may want the streams to appear as a dash-dot-dot-dash blue line pattern with a width of .05.

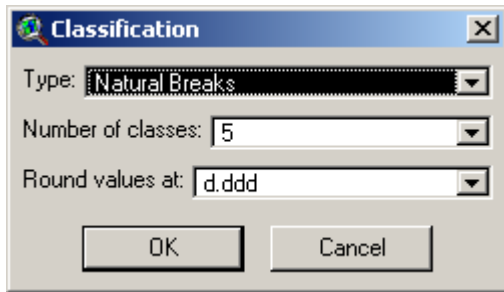
ArcView allows you to edit a themes symbology by double clicking on the theme legend or by selecting the Edit Legend menu choice available under the Theme menu.



Doing so opens the Legend Editor dialog. There are many features available in the Legend Editor to help you symbolize your features in a meaningful way. An example would be using the grouped road segments theme generated by SEDMODL2.

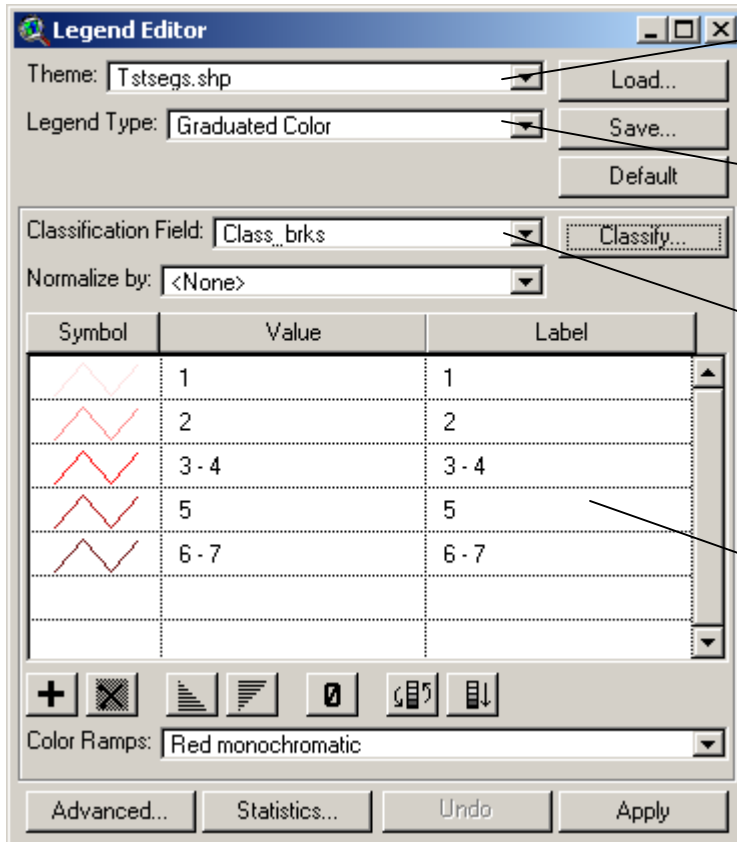


Clicking on the Classify button on the Legend Editor will show the Classify dialog.



Accept the default "Natural Breaks" classification type but change the number classes to seven. Click on OK to finalize your choices.

The Legend Editor will change to reflect the class breaks change.



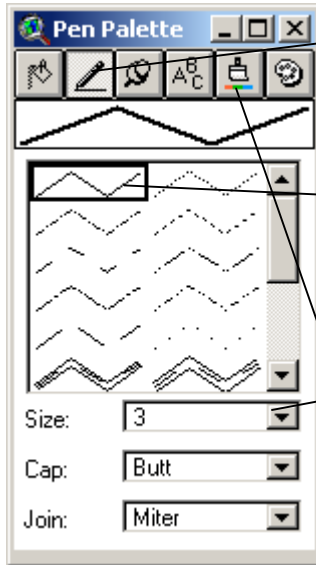
Confirm or select the theme you want to symbolize.

Select "Graduated Color" from the Legend Type pick list.

Select the Class_brks field that was used by SEDMODL2 to classify the sediment.

ArcView initially classifies the data into five classes. Since SEDMODL2 potentially has seven classes the number of class breaks may need to change.

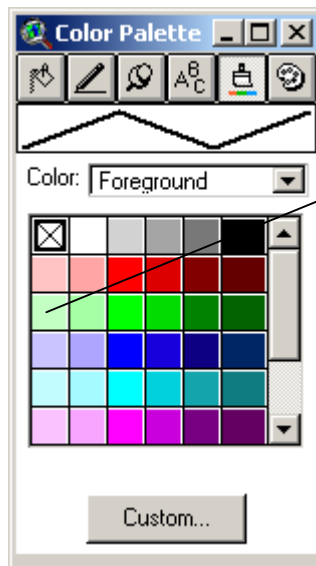
The Symbol Window allows the user to alter how features are symbolized in a View or in a map Layout. The Symbol Window allows the user to adjust the fill color, fill pattern and outline color of a polygon theme; the line style, line width and line color of a line theme; the marker symbol, marker size and marker color for a point theme; and the font size, type, and color annotation. Using the previous example we can change the size and color of the features in the grouped road segment theme.



The current palette should be the Pen Palette.

Accept the default solid line type.

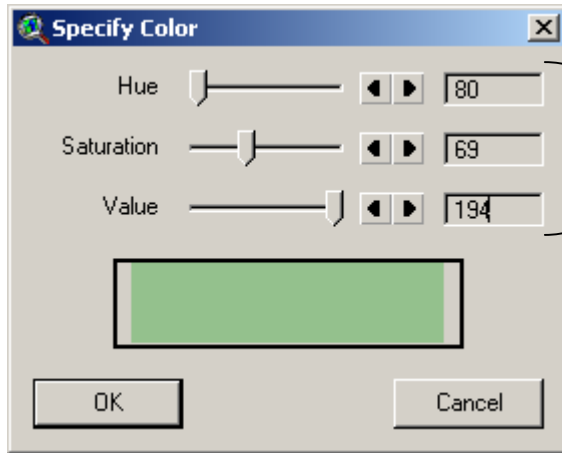
Change the Size to 3. Accept the default cap and join types.



Finally click on the Color Palette button to display the color palette window.

Select a color to be applied to the current class break.

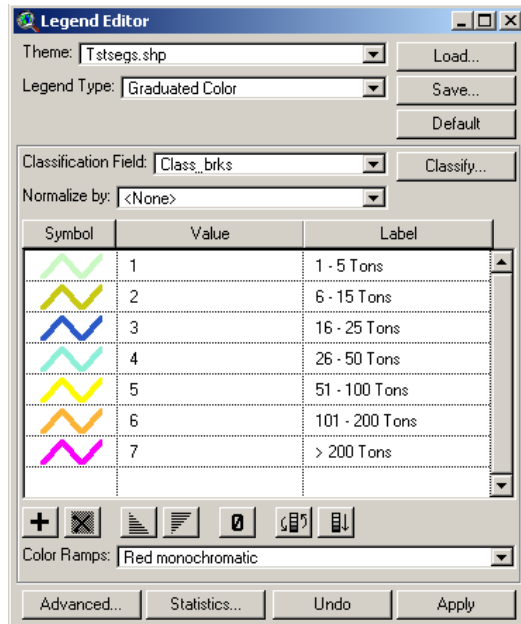
If you want to apply the same custom colors used by SEDMODL2 you can define custom colors by clicking on the Custom button on the Color Palette to display the Specify Color dialog.



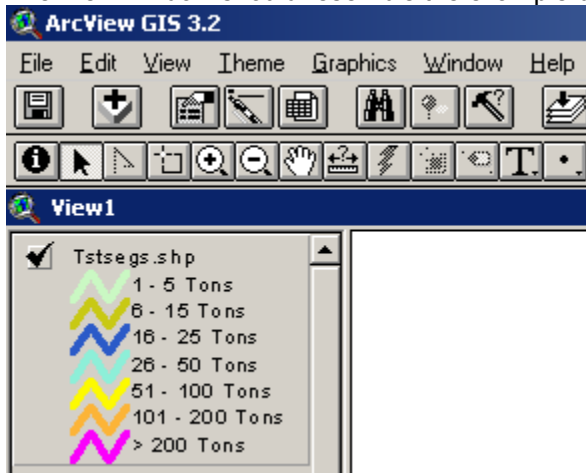
Custom colors can be defined by adjusting the Hue, Saturation and Value settings for each of the seven class breaks.

Class Break	Hue	Saturation	Value
1	80	55	249
2	43	231	202
3	158	200	201
4	118	105	240
5	42	255	254
6	27	200	253
7	213	255	253

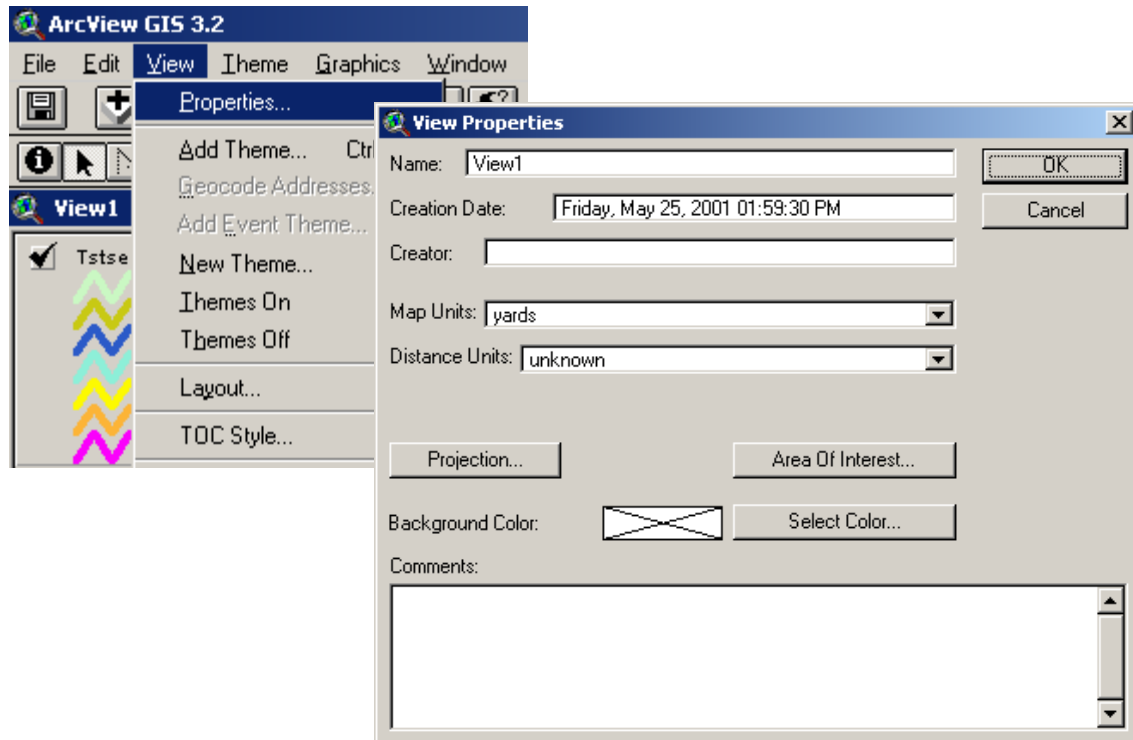
The Legend Editor should resemble the example below:



The View window should resemble the example below:



Maps are most useful when published at a standard scale. A recommended scale is 1:12,000, given the average size of the features generated by from a SEDMODL2 run. Two steps are necessary to set a fixed scale. First the user needs to define the units of measure associated with the themes in the view. This is accomplished by selecting the “Properties...” choice under the View menu.



Select the Map Units that meet your theme’s units and click on OK when done.

The second step to setting a fixed scale involves typing in the fixed scale value into the scale field. Located on the far right side of the View Toolbar. After typing in the value you want press ENTER. The view will redraw at the scale you specified, centered on the middle of the view.



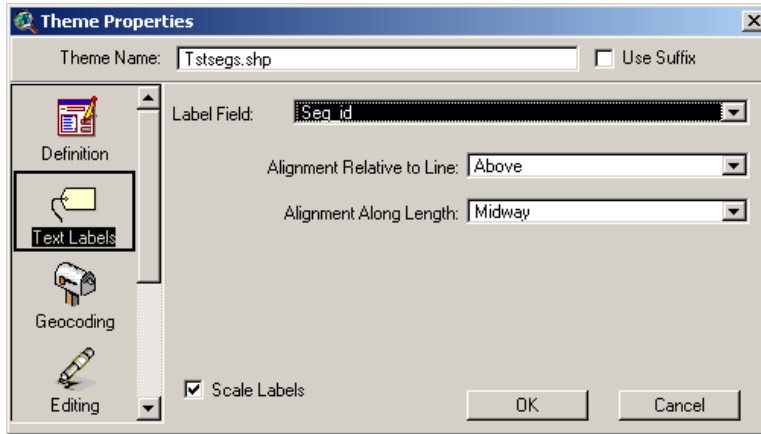
Type in the value you want and press ENTER

Before we create the map layout we need to pan to an area of interest and label the features with the Seg_ID. The user can pan around the view by selecting the Pan tool from the View Toolbar.

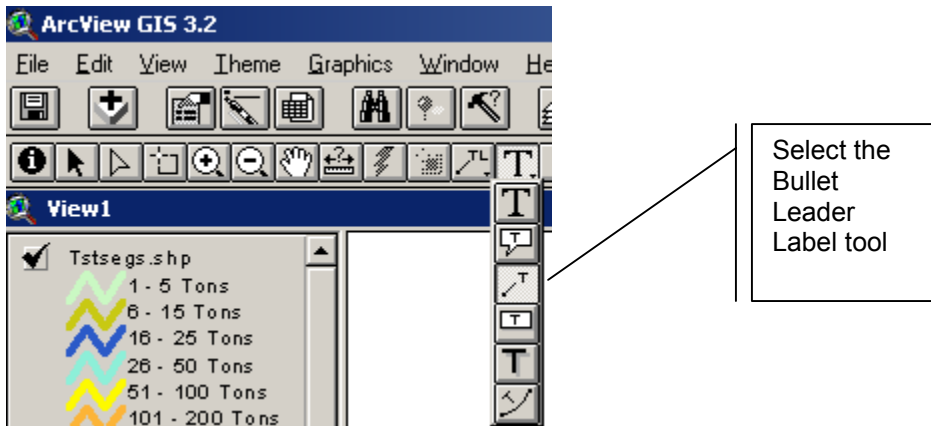
Before labeling the features it's a good idea to select the font and font size from the Symbol Window. Select the "Show Symbol Window" choice from the Window menu choice. After the Symbol Window opens you can select a font and size from the Font Palette. Serif fonts like Times New Roman makes clear easily readable text on a map. Depending on how "crowded" your features are you can select a font size of 8 to 12. Large fonts overpower the map and small fonts make the text difficult to read. A point size of 9 usually works well at 1:12,000 scale.



Another step involves selecting the Seg_ID field to use for labeling the features. This can be accomplished by selecting the “Properties...” choice from the Theme menu choice. After the Theme Properties dialog opens select Seg_ID from the label field pick list. Click on OK to continue.

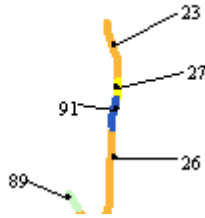


Labeling features can be as simple as using the “Auto-Label...” choice under the Theme menu. Or take the time to manually place each label. Auto labeling linear features often results in having to move each label, so you might as well do it manually. Placing labels above the features can result in crowded or overlapping labels. A recommended approach involves using bullet leader labels, which allows the user to place a label further way from the feature with a leader line connecting to the feature. Bullet leader labels can be selected from the View toolbar.



The cursor will take on the shape of a cross hair with a label located below it. The user can then click on a feature and draw away from the feature to a point where the label should be placed.

An example of label placement using a Bullet Leader Label is found below.



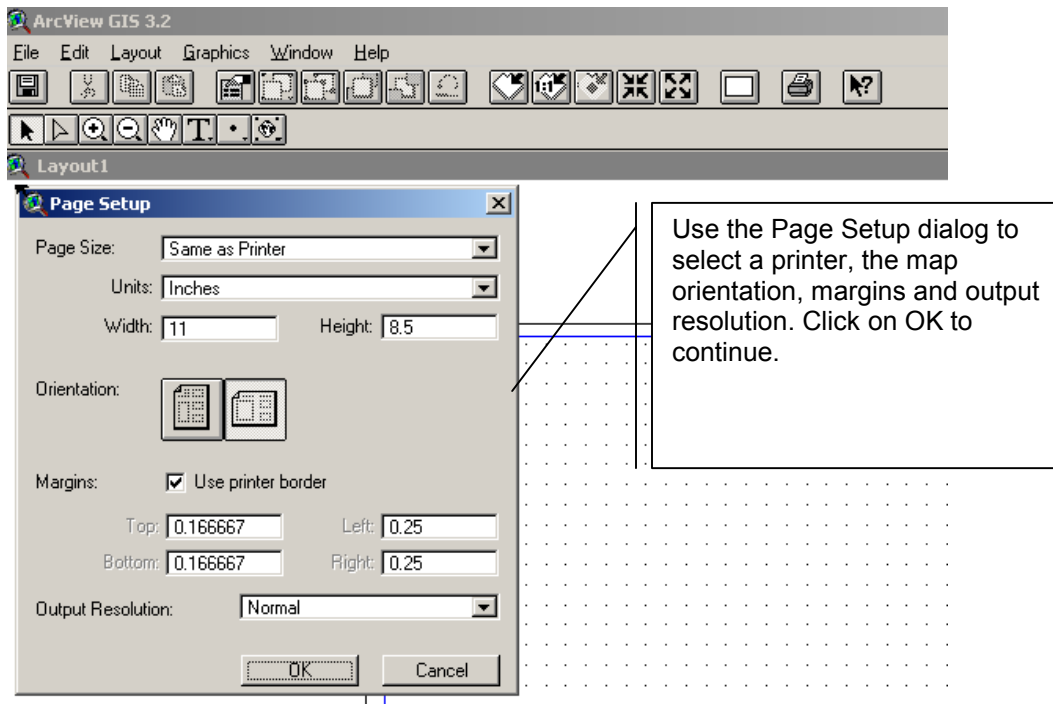
Once all features within the area of interest are labeled the user can create the map layout by selecting Project Window choice under the Window menu. If you haven't named and saved the project the choice will be "Untitled" and should be the first selection.

When you arrive at the project window open a new Layout.

A layout is where a map is created. There are several steps involved

- Page Layout
- Add a View
- Create a Legend
- Add a scale bar and RF Scale
- Add a north arrow
- Add a title

Page Layout



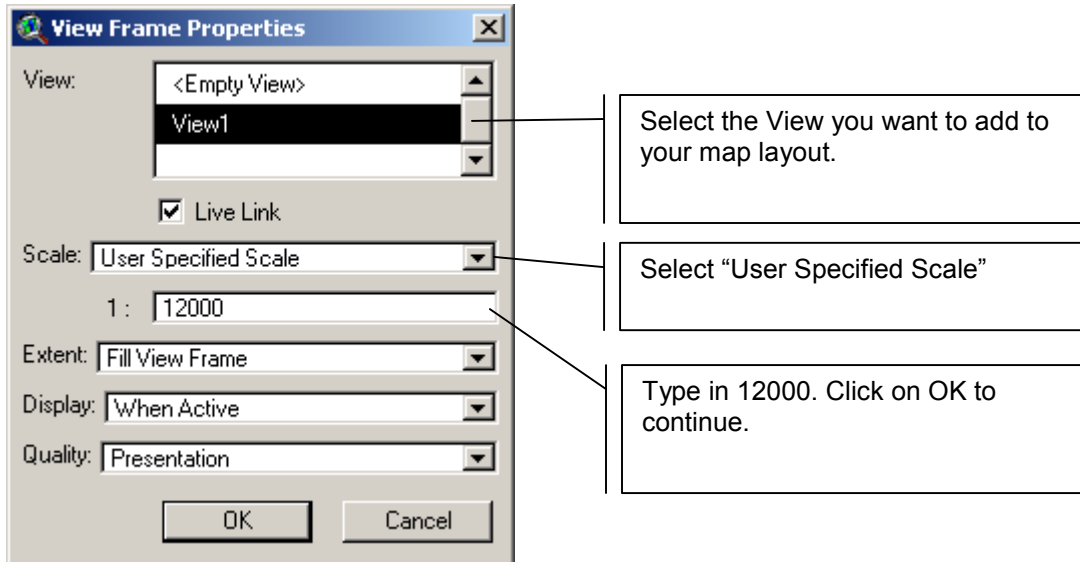
Add a View

Select the View Frame tool from the Layout Toolbar. The cursor will change to a cross hair.

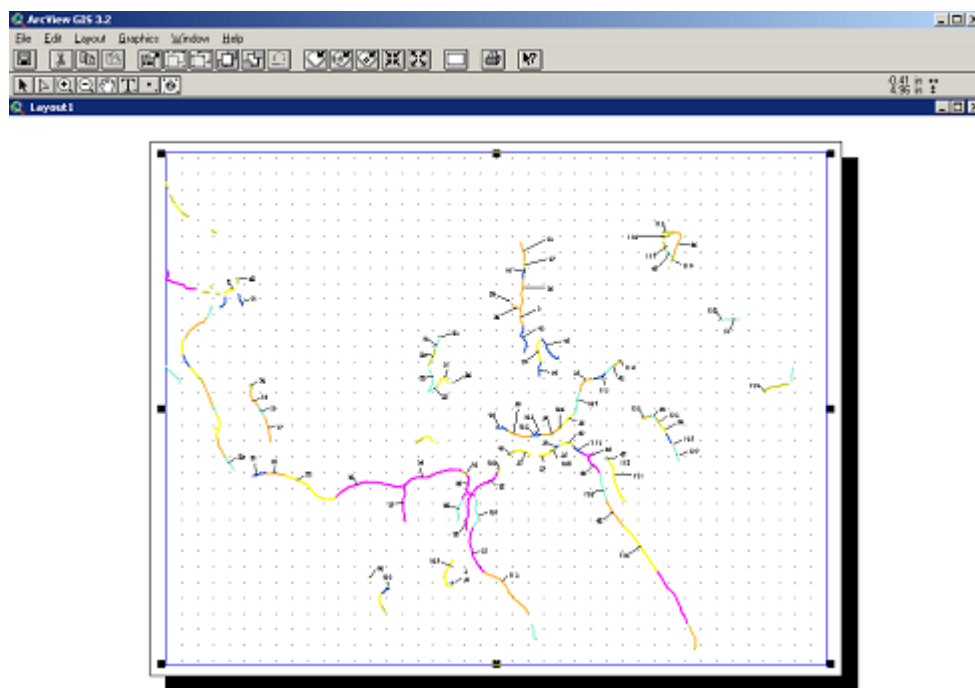


To place a view frame in the layout the user must drag a rectangle within the blue page margins. The trick is to get close, but not too close the margins and to have the View Frame equal distances from the map edge.

After the View Frame has been added the user is asked to select the view they want to add and make decisions about how the view is displayed in the View Frame.



The Layout should appear as:

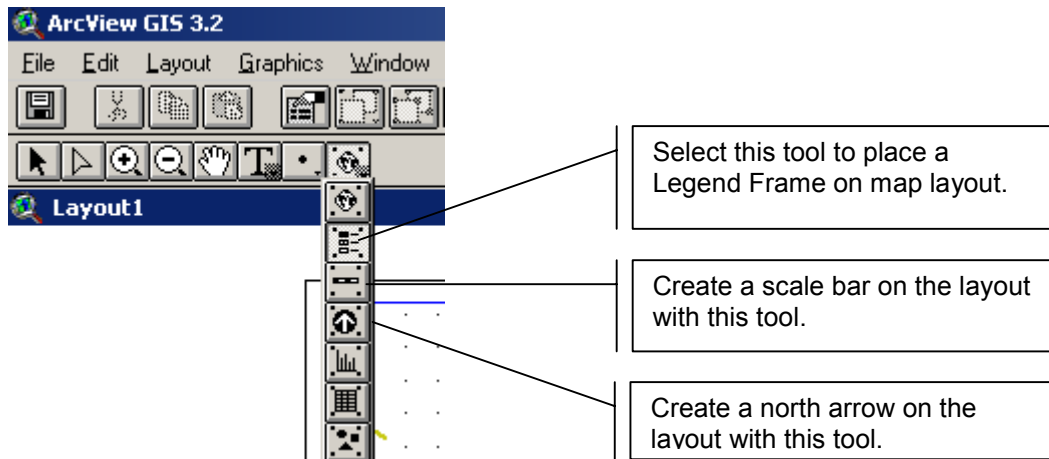


A map title can be added by selecting the Text Tool from the toolbar.



Click on the map layout at the location where you want the title to appear. A Text Properties dialog box will appear which will allow the user to type in the text to appear on the title and an opportunity to apply additional formatting. Unless the user has set the font and point size for the text prior to placing the text on the map layout it will likely be necessary to open the Symbol Window and make changes to the title text.

A legend can be added by selecting Create a Legend Frame tool from the Layout Toolbar.



Locate an area on the map layout where no features exist or where it doesn't matter if the legend obscures features. Drag a rectangle on the map layout that represents the size and location of where the legend should appear. After releasing the mouse button the Legend Frame Properties dialog will appear, allowing the user to select the View Frame that should be associated with the legend. If the user wants to apply additional edits or manipulations of the legend they can select the Simplify choice from the Graphics menu choice. Simplifying the legend disaggregates the legend into individual elements that can be edited using the Symbol Window Dialog or the Text Properties Dialog.

To place a scale bar on the map select the Create Scale Bar tool from the Layout Toolbar. To place a North Arrow select the Create North Arrow tool from the Layout Toolbar.

If your computer is connected to a printer you can print a copy of you map.