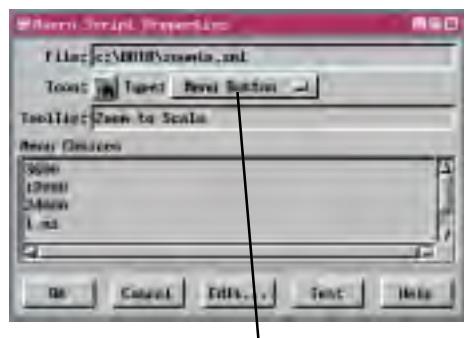# Zoom to Specified Map Scale

The Zoom to Scale macro script lets you specify a number of different map scales or ground dimensions to use to adjust the display scale. When you pick the desired scale from the drop-down menu on the Zoom to Scale script icon, the contents of the View window are redrawn at the indicated scale. If

the scale is specified in ground dimensions, for example 1 mile or 10 miles, you get the specified distance plus 10% for the smallest window dimension. (For example, if you choose 10 miles and the window is wider than it is tall, 11 miles is visible in the vertical dimension of the window.)
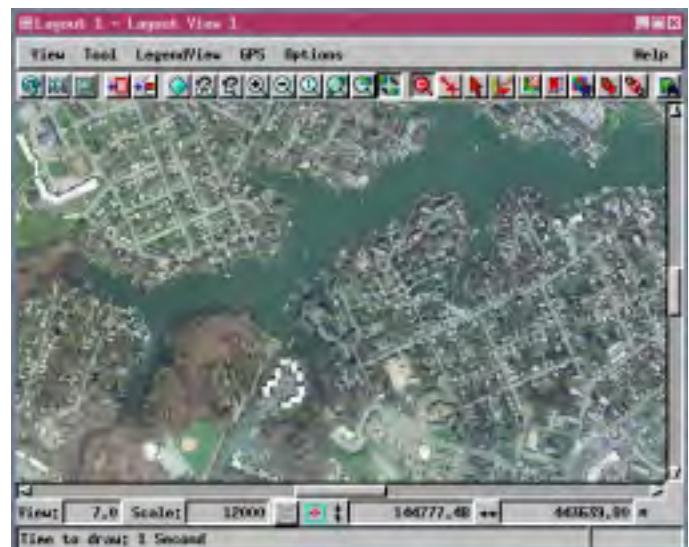
This option menu lets you designate whether your macro script is designed for a simple button (push the button and the macro script is executed) or a menu button. In order for a macro script to provide choices, you must indicate you want the icon to be a menu button. You can then type in the menu choices you want.

In order for the Zoom to Scale script to work as designed, the objects displayed must either be georeferenced or scale calibrated. In order for map scale displays to be accurate, you also need to have set up your screen width and height on the MI/X panel for General System Preferences (Support / Setup / Preferences).

This particular script accepts two kinds of scale input, map scale and miles. If the menu choice is purely numeric, it is taken as a designated map scale. If the menu choice consists of a number, a space, and any other character, it is taken as a designated ground distance in miles.

Each time you select from the Zoom to Scale icon menu, the scale is adjusted while maintaining the same view center if possible (if you are zooming out and are near the edge of the displayed objects, the view will be recentered).

Remember when working with map scale that a smaller entered number means things appear larger. For example, the dimensions of a park or other area of interest will be twice as large at 1:12000 as they are at 1:24000, which are represented by menu choices of 12000 and 24000, respectively.

Script for Zoom to Scale (zoomto.sml)

```
if (NumberTokens(MenuChoice$," ") == 1) {
        ViewSetMapScale(View,StrToNum(MenuChoice$));
        }
else if (NumberTokens(MenuChoice$," ") == 2) {
        widthmeters = View.PixelSizeMillimeters * View.Width / 1000;
        heightmeters = View.PixelSizeMillimeters * View.Height / 1000;
        if (widthmeters < heightmeters) {
                mindim = widthmeters;
                }
        else {
                mindim = heightmeters;
                }
        newdim = StrToNum(GetToken(MenuChoice$," ",1)) * GetUnitConvDist("miles","meters");
        newscale = newdim / mindim * 1.1;
        ViewSetMapScale(View,newscale);
        }
```

You could change this script to zoom to entered kilometer dimensions, rather than miles, by changing the word *miles* to *kilometers* here.