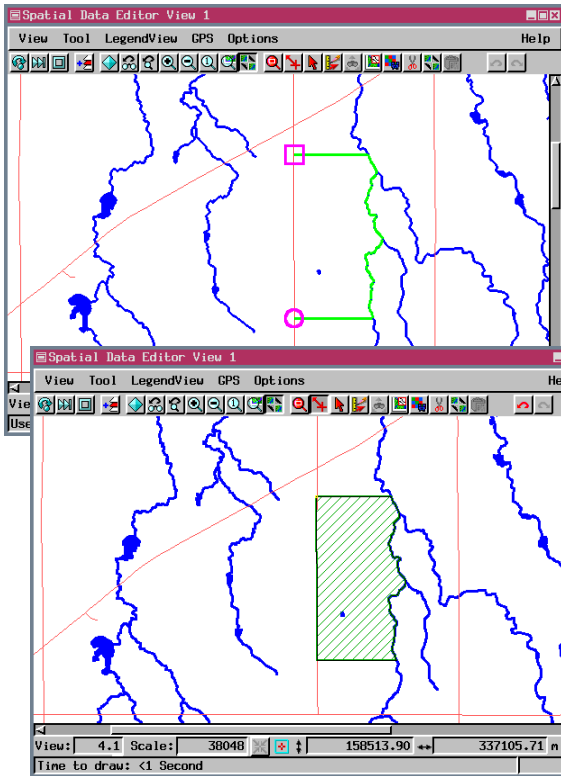


Auto-Tracing Vector Line Segments



Commonly you want boundaries lifted from an existing data layer into a new layer. The Auto-Trace capability in the Spatial Data Editor lets you copy line segments from one or more vector reference layers to the layer you are creating or editing. You can even switch reference layers for different parts of the line you add. For example, you can draw a property parcel outline that runs between a road and a stream, auto-trace along the stream, draw back to the road, and then auto-trace along the road, as shown in the example at the left. The roads and hydrology in the example are in separate reference layers.

The Auto-Trace mode is available when adding a line if a reference layer has been selected as the snap layer. You can switch between the three line editing modes (draw, stretch, and auto-trace) as necessary while adding a line. In the case of this example, the roads are initially selected as the snap layer with the Add Line tool in the stretch mode because the polygon starts on the road and goes straight to the stream (nothing is being auto-traced). Once this line segment is drawn, the snap layer is changed to the hydrology, so the second vertex will snap to the stream. The Add Line tool is then changed to the auto-trace mode. Drawing in auto-trace



mode is a simple matter of clicking along the line you want to auto-trace at single node intervals (auto-tracing will not jump more than one node). The line in this example branches shortly after it is met, so your first click in auto-trace mode should be after this first branch but before the line branches again. The next click in this example is at the point even with the south parcel boundary. At this point you would change back to stretch mode (because the next line segment does not follow any existing lines), click straight across on the road, then change the snap layer back to roads. Also, change back to the auto-trace mode. You can use the Close Polygon button to auto-trace the road and close the polygon as soon as there is one or fewer nodes along the line to be auto-traced in the close-polygon gap. Thus, with just five clicks in the View window, a very complex polygon has been created. The parts of the line that were auto-traced are a vertex-by-vertex copy of the line in the reference layer. Not only do you save time, but you avoid the conflation (sliver polygons and other artifacts) that often accompanies direct drawing of complex lines.

