Spatial Editor

Saving Areas of Raster Layers

The Save Section As feature of TNTmips' Editor lets you select any area of any raster, vector, CAD, or shape object and save it as a new object of the same type. You can draw a free form polygon to select the area, use the circle or rectangle tool, or use an already saved region. The contents of the Save Section As window change with the selected Region Type (Polygon, Circle, Rectangle, or Region) to provide the appropriate options for the selected tool. The erase functions available when drawing lines and polygons using the GeoToolbox are also available when drawing a polygon to define a section (see the Technical Guide entitled *Geo-Toolbox: Erasing Portions of Lines and Polygons*). For more information on using the Save Section As feature with vector, CAD, and shape objects, see the TechGuide entitled *Spatial Editor: Saving Selections from Geometric Layers*.

When you save an area from a raster object, you also get a null mask. A null mask is a highly compressed, binary raster that indicates whether a cell is used (1) or ignored (0). For more information see the TechGuides entitled *Miscellaneous: Managing Raster Null Cells* and *Spatial Display: Create and Edit Masks and Null Masks*. Raster objects are always rectangular regardless of the shape you draw for your area. The null cells in the new raster you create using Save Area As are any that were null in the original object and any cells not included in your selection that are needed to fill out the rectangular raster object. Both types of cells are defined by the null mask.
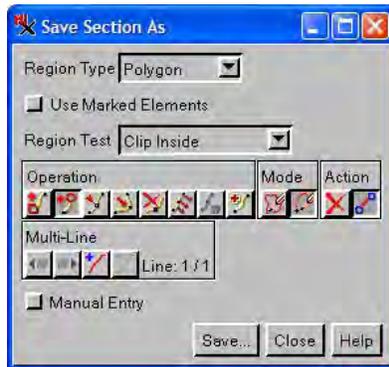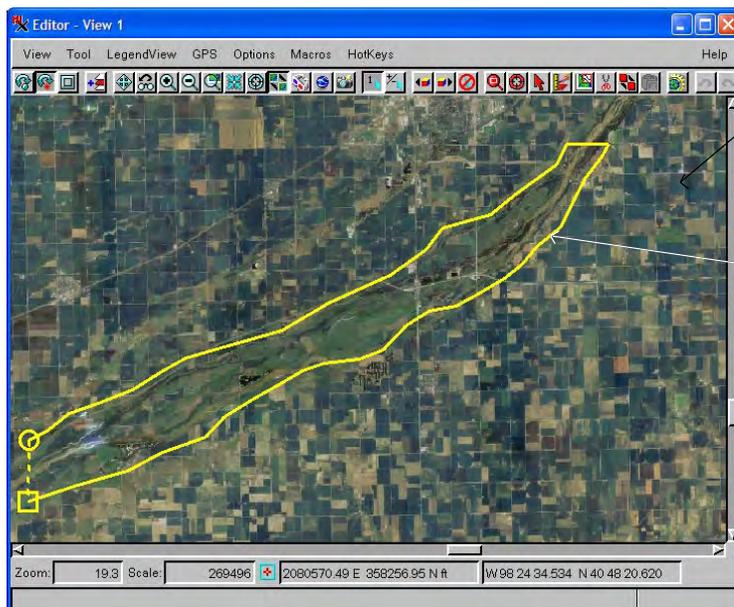
There is a Manual Entry check box that lets you create or refine your shape by entering/editing coordinates when drawing a polygon, circle, or rectangle to define the area to copy. When defining a rectangular area, you can also specify a rotation angle. To interactively rotate your drawn rectangle, hold down the shift key when near a corner to pivot the rectangle around the opposite corner.

For raster objects, your Region Test options are Inside or Outside. Compressed raster input is uncompressed in the output. Areas outside the defined region will have a value of zero in the output and are defined as null by the null mask.

1-meter mosaic of Nebraska (352,256 lines x 737,282 columns)

Platte River floodplain

New raster created by drawing the polygon at the left after zooming in, choosing Object/Save Section As, then clicking on Save.
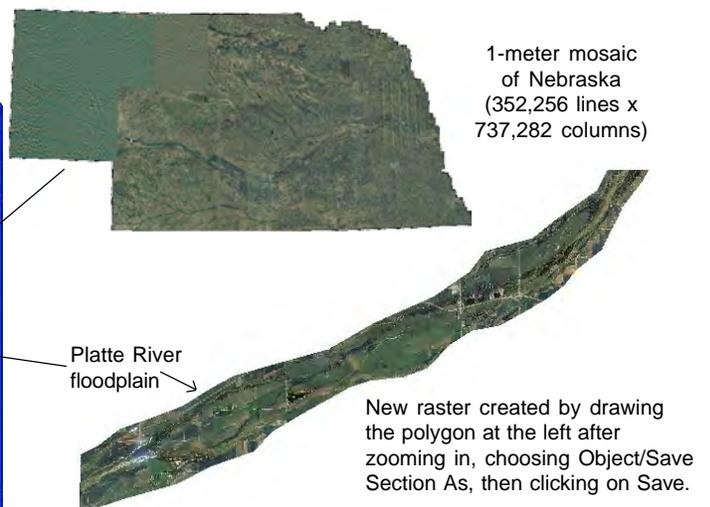
If you are only interested in studying or analyzing a certain stretch of a river, there is no need to maintain the raster for the full state. In this example, the 1-meter Nebraska input object has 352,256 lines and 737,280 columns while the floodplain output object has 18,663 lines and 30,962 columns. Both are 24-bit, composite color raster objects with color maps and Nebraska State Plane georeference. The output object also has a null mask.