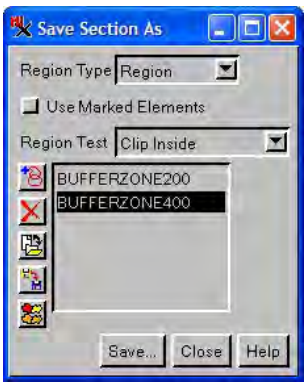
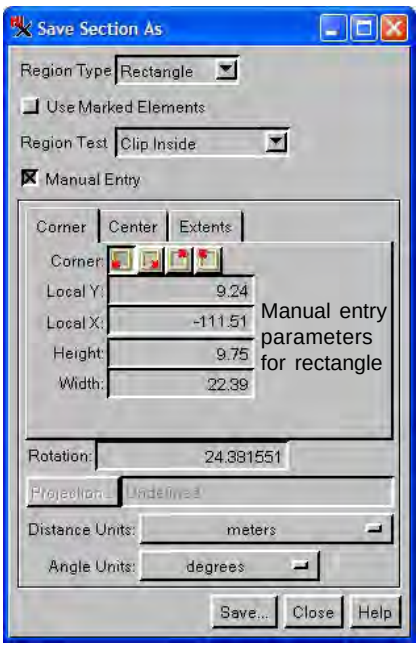
Spatial Editor

Saving Selections from Geometric Layers

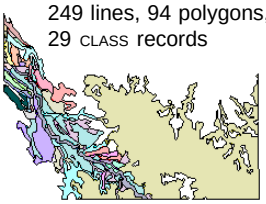
The Save Section As feature of TNTmips' Editor lets you select any area of any raster, vector, or CAD object and save it as a new object of the same type. Shape objects opened using Object/Open External are saved as Project File vectors by this feature. You can draw a free form polygon to select the 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 *GeoToolbox: Erasing Portions of Lines and Polygons*).



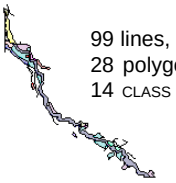


There is a Manual Entry check box that lets you create or refine your shape by entering/editing coordinates when drawing a polygon, circle, or rectangle to define your area of interest.

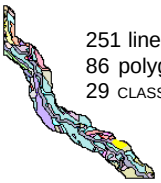
The Region Edge Test choices for vector and shape objects are Partially Inside, Completely Inside, Clip Inside, Partially Outside, Completely Outside, and Clip Outside. If a database record has no attached elements in the output, it is automatically removed from the database. For CAD format, your options are Partially Inside, Completely Inside, Partially Outside, or Completely Outside. With vector, CAD and shape objects you can also choose to use only the marked elements when applying the Region Edge Test.



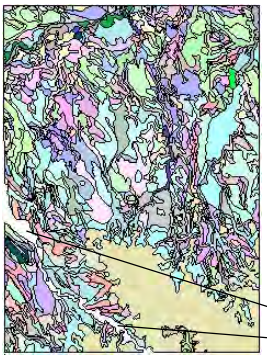
- **Partially Inside** includes all elements that are completely or only partially inside. The complete element is included if any part of it is inside the region boundary (vector or CAD).



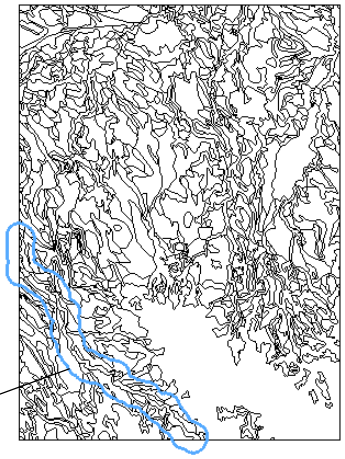
- **Completely Inside** includes only elements that are fully inside the region boundary. Any elements that cross the boundary are not included (vector or CAD)



- **Clip Inside** clips lines and polygons to region boundaries (vector only).

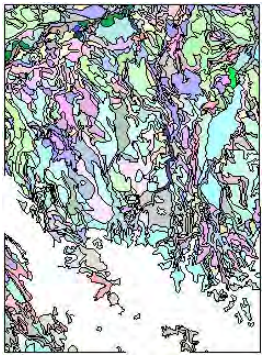


- **Partially Outside** includes the elements fully outside the region boundary and those that begin outside and cross into the region (vector or CAD).



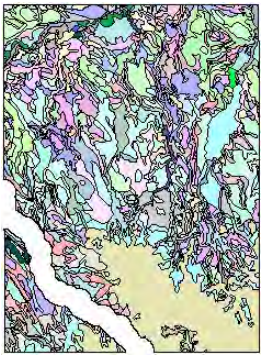
Region used to define areas saved using the designated Region Edge Test to save soil polygons within 400 meters of a selected perenniel stream. The results for each region edge test are presented with the description of that region edge test (at right and on back). The input object has 2237 lines and 777 polygons. Both original and results are 2D X-Y vector objects with style objects, geographic georeference, and an identical database structure. The CLASS table in the original vector has 75 records.

(over)



- **Completely Outside** includes only those elements that do not cross the region boundary (vector or CAD).

2028 lines, 702 polygons,
74 CLASS records

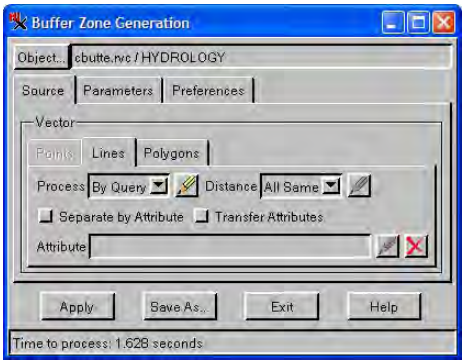


- **Clip Outside** clips at the region boundary keeping all elements from the outside of the region out to the extents of the vector (vector only).

2181 lines, 758 polygons,
75 CLASS records

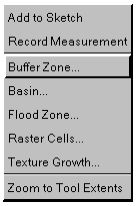
Note: The example in this TechGuide uses a region generated in TNTmips' Spatial Editor from the results of the Buffer Zone process (Geometric/Compute/Buffer Zones). The desired buffer zone polygon (see illustration right) was selected by mouse and converted to a region by choosing Compute Region/Marked Polygons from the right mouse button menu for the buffer zone layer's polygon database. The initial buffer zones were computed at 400 meters around perennial streams in the Buffer Zone process. Buffer zone regions can also be computed directly in the Editor from marked elements.

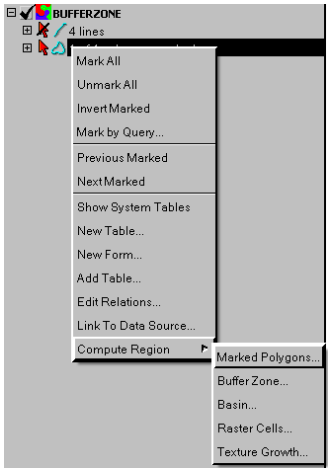
Buffer zones were generated at 400 meters from perennial streams, which were selected by query to identify lines with this attribute (Class.Description =="Perennial stream") before the buffers were computed.



The Right Mouse Button Menu (RMBM) in the Display or Editor Layer Manager lets you generate regions from marked elements either directly or with additional computation. To generate regions from elements drawn using the GeoToolbox, right-click near the drawn element in the View window and choose the desired region type.

RMBM in View window for elements drawn with GeoToolbox





RMBM for polygon database in Layer Manager

This buffer zone polygon was selected to generate the region used for saving part of the soils vector object to a new vector object using the various edge test methods.