# Flowpaths and Basins from Seed Points

The Watershed process in TNTmips (Terrain / Watershed) derives drainage patterns and watershed boundaries from an elevation raster. Flowpaths, watersheds, and basins (subcatchments) are computed over the full extent of the elevation raster by default. Alternatively, you can determine the flowpaths originating from, and/or catchments contributing to, particular point locations in the terrain by using the Seed Point controls on the Flowpath and Basin panel of the Watershed Analysis window. For example, a seed point might represent a sample locality where a chemical anomaly was detected and the upstream basin therefore represents the region containing the potential source. Or the seed point might represent a pollutant source, and the downstream flowpath indicates the path of dispersal of the pollutant.

To place seed points interactively, choose the Manual option from the Mode menu in the Seed Point controls and turn on the Seed Points tool in the Watershed Analysis View. Each left-click in the View with this tool places a seed point, marked by a cross symbol. You can left-click and drag any previously-placed seed point to relocate it. The seed point locations are listed on the Manual tabbed panel of the Graphic Tool Controls window, which opens when you turn on the Seed Point tool. To compute the watershed elements, right-click in
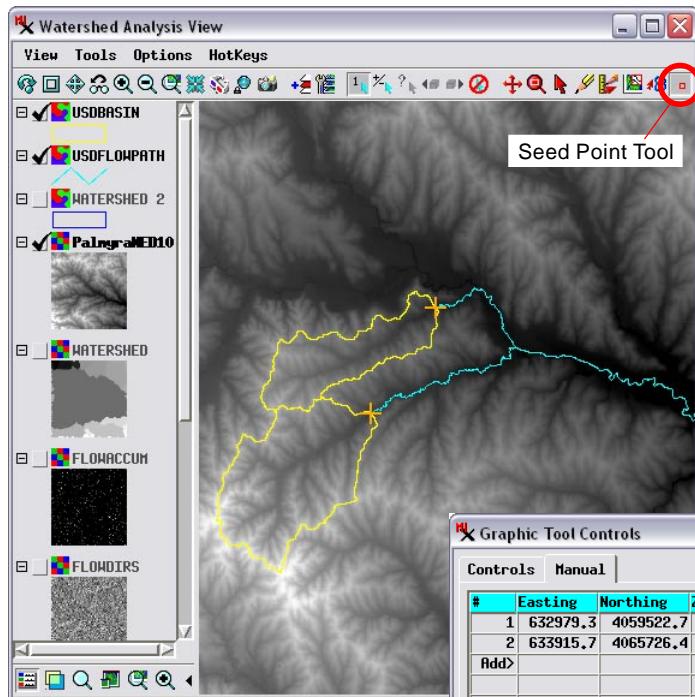
Basins and flowpaths computed from two manually-placed seedpoints.
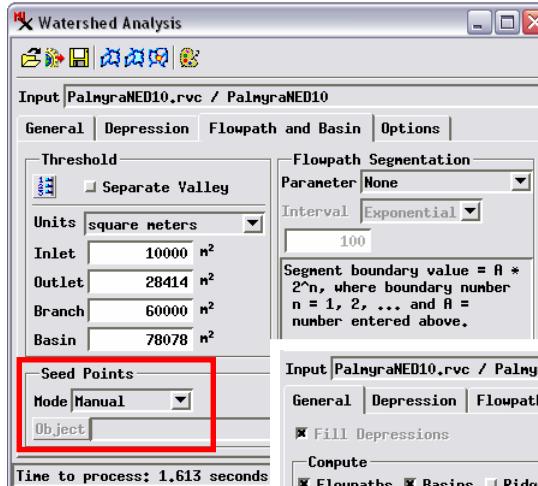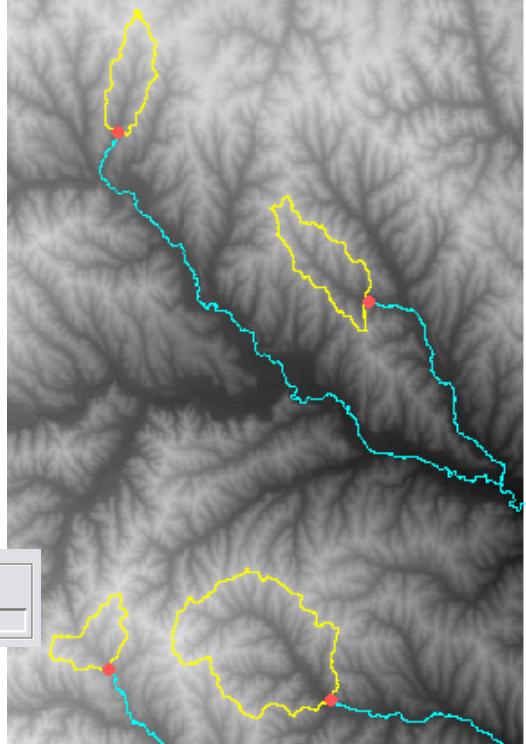
the View or press the Run icon button. Use the *Flowpaths* and *Basins* toggles on the General tabbed panel to set the elements to generate.

You can also use seed points from an existing geometric object (vector, CAD, or shape) to generate flowpaths and/or basins. Choose *From Object* from the Mode menu and when prompted choose the object containing the point locations. To revert to computing flowpaths and basins for the entire elevation raster, choose the Automatic option from the Mode menu.

Right, basins and flowpaths computed from four seed points (red dots) from a vector object using the From Object mode (above).