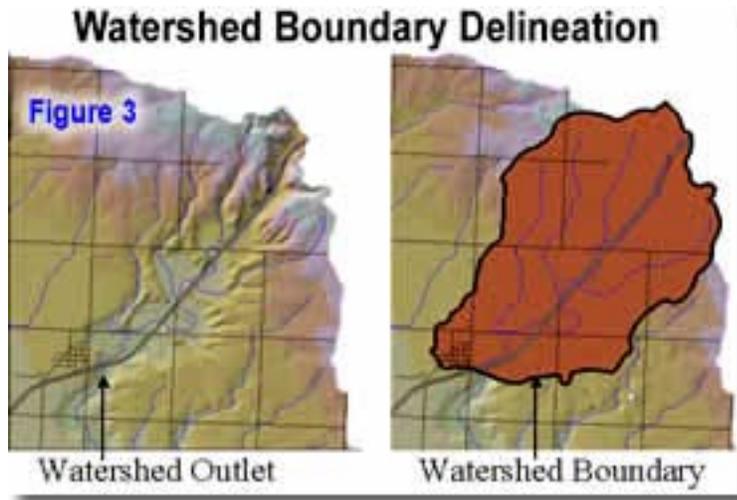


## *Delineating Watershed Boundaries*

Traditionally, watershed boundaries are manually delineated from contour lines on topographic maps. Automated techniques use the flow direction and accumulation grids to determine basin boundaries. Using these grids, all the cells that flow through a given outlet point define the extents of a basin draining to that point. The GIS can quickly determine all the grid cells contributing runoff to a basin outlet, delineate a bounding polygon around all the cells, and compute a drainage area. Watershed boundaries can also easily be subdivided or aggregated to support various hydrologic modeling techniques.



The above figure illustrates the watershed delineation process for a user-defined outlet point.  
Source: Based on [Minnesota Department of Natural Resources](#)