

Watershed Databases

NetMap's watershed databases consist of two components

1) **NetMap's Watershed Databases**: this comprises the full set of attributes that have been or can be created by NetMap tools (includes the universal stream layer and relevant attributes). The databases can include information on fish habitat potential, erosion potential, sediment, thermal, and in-stream wood loading, and a variety of road related parameters. Other attributes may relate to fire risk, burn severity, vegetative age, tributary confluence effects, sediment delivery, stream power, substrate size, and wood accumulation types, etc.

The databases are to be used solely with NetMap tools.

2) **Universal Stream Layer**: This GIS layer, created by NetStream, is a vector shapefile of the traced channel network, divided into reaches that have several channel attributes. Channel reaches generally range from 20 to 200 m; see NetStream documentation for additional information.

Output grid files include flow direction, contributing area, measures of topographic convergence, and an estimate of floodplain extent. Available attributes (calculated from the DEM) include drainage area, elevation, flow direction, and gradient; channel width and mean annual flow are calculated using regression equations with user-supplied coefficients. Although the universal stream layer does not provide the functionality of NetMap (and only a small fraction of its parameters), it does provide river network consistency from one watershed to another across the region.

NetMap database citation: When using NetMap tools and NetMap databases, please cite as:

NetMap 200X. Earth Systems Institute. www.netmaptools.net.

or:

Benda, L., D. J. Miller, K. Andras, P. Bigelow, G. Reeves, and D. Michael. 2007.

NetMap: A new tool in support of watershed science and resource management. *Forest Science* 52:206-219.

Please also note: When using models within NetMap, either developed and published by ESI or developed and published by others, use the appropriate original source citation (found in the Technical Help section of NetMap).